

Thesis
Reports

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THE MARKET STRUCTURE FOR MAJOR SOFT-
WOOD PRODUCTS IN THE CENTRAL AND
SOUTHERN ROCKY MOUNTAIN AREA.

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FINAL REPORT

THE MARKET STRUCTURE FOR MAJOR SOFTWOOD PRODUCTS IN THE
CENTRAL AND SOUTHERN ROCKY MOUNTAIN AREA

Submitted to

USDA Forest Service Rocky Mountain
Forest and Range Experiment Station

by

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THE RESEARCH PROBLEM

Sound forest management in the Rocky Mountain Region requires an understanding of the nature of the market for wood products manufactured from raw material generated through management of the forest resources. A major contribution to understanding the nature of the market would be information and analysis of the market structure for the major softwood products in the Central and Southern Rocky Mountain (CSRM) area. This area is defined as the states of Arizona, New Mexico, Colorado, Wyoming, and Western South Dakota. Major softwood products are lumber, plywood, particle board, and millwork.

The market structure analysis includes information about market channels¹ for the major softwood products moving to construction, industrial, and consumer markets. Of particular interest are channels from producers both in the CSRM area and elsewhere to markets in the CSRM area and from producers in the CSRM area to markets elsewhere.

The research problem also encompasses an evaluation of the hypothesis that softwood lumber manufactured in the CSRM area competes unsuccessfully within CSRM area with comparable lumber imported from elsewhere. This hypothesized competition could occur across all grades of lumber, but it may be possible competition is primarily within certain grades. If this hypothesis is supported, the study of the market structure should contain purported explanations by channel members of why lumber produced elsewhere is purchased and used in the CSRM area in preference to comparable lumber produced in the CSRM area.

¹a channel of distribution is any series of firms from producer to final user.

THE RESEARCH QUESTIONS

The statement of the Research Problem produces the following specific research questions:

1. What are the market channels for major softwood products moving to construction, industrial, and consumer markets?
 - a. What are the channels for producers in the CSRM area to reach markets in the CSRM area?
 - b. What are the channels for producers outside the CSRM area to markets in the CSRM area?
 - c. What are the channels for producers in the CSRM area to markets outside the CSRM area?
2. Are forest products brought into the CSRM area direct substitutes for products already produced in the area?
3. If research question #2 is yes, are the reasons one or more of the following?
 - a. Price differentials?
 - b. Specification or subjective preference for certain species by buyer or seller?
 - c. Quantity availability by grade or species?
 - d. Quantity available by speed of service?
 - e. Quality variation within grade?
 - f. Availability through established buying connections?
 - g. Affiliation with sole source producer or market?
 - h. Is there a bias against locally produced forest products in applications for which local products are available?

- i. Does #2 hold true across all grades or only within certain grades of products?

THE RESEARCH METHODOLOGY

The research problem does not of itself imply any particular methodology for conduct of this study. However, while published or other available secondary data would certainly be applicable, such data are not obtainable in the depth required for answering the research questions. Thus, it was decided to obtain the information by questioning, questionnaire development, sample frame specification, sampling procedure, and data analysis specification.

Information by Questioning

As specified above, the literature did not provide secondary information of a type which would allow answering the research questions. Therefore, it was necessary to rely on primary data gathered by questioning producers, users, and channel members. Parameters of time, cost and information type led to the decision to gather information via a self administered questionnaire delivered and returned by mail.

THE RESEARCH METHODOLOGY

The research methodology specified the obtaining of information by questioning, questionnaire development, sample frame specification, sampling procedure, and data analysis specification.

Information by Questioning

The literature did not provide secondary information of a type which would allow answering the research questions. Therefore, it was necessary to rely on primary data gathered by questioning producers, users, and channel members. Parameters of time, cost, and information type led to the decision to gather information via a self administered questionnaire delivered and returned by mail.

Questionnaire Development

Individualized questionnaires for producers and channel members were drafted which would call out the desired information. These drafted questionnaires were discussed in personal interviews with selected knowledgeable individuals in the industry. Modifications following these discussions resulted in a second draft of the questionnaires. The second draft was pre-tested with a small group of respondents representing industry segments. Modifications following this pretest resulted in the questionnaires to be mailed (Appendix A).

The Sample Frame

The investigators desired a response from approximately fifty firms in each category of producers, wholesalers, retailers, and users. An anticipated response rate of 20 percent suggested a mailing of 1000. The sample frame for the 1000 is described in Table 1. The sample from each group was weighted by state population and randomly selected from the sample frame. The frame was developed from Trade Directories, telephone book yellow pages, and Forest Service documents.

Sampling Procedures

The 1000 questionnaires were mailed on 8/27/81 and included a cover letter (Appendix A). On 9/3/81 a postcard reminder, Appendix B, was mailed in an attempt to increase the response rate. For questionnaires returned as undeliverable, a phone call, if the number was available, was made asking for a new address and asking if the individual would be willing to complete the questionnaire. From 9/15/81 to 9/28/81 a series of follow-up phone calls were made to respondent categories of light response in an attempt to obtain the desired number of completed questionnaires. Considering the length and complexity of the questionnaire, the response rate of 24 percent was considered to be very good.

Data Analysis

The questions were structured to yield up to 522 variables. The data was then coded and key punched. Statistical routines were performed with the use of the Statistical Package for the Social Sciences (SPSS) on a CDC6400. The SPSS program allows a wide variety of data organization, categorization, and statistical analysis. Over 2200 pages of computer output were generated for the data analysis and description.

Table 1
Description of Sample Frame

	# of firms	# of mailing	# of undelivered returns	# of usable returns	% return
Mills	242	242	31	46	21.8%
Wholesalers	209	209	20	53	28.0%
Retailers					
Lumber	310	260	9	59	25.6%
Home Ctr.	26	26		12	
Users					
Contractors	*	100	22	17	21.9%
Bldg. Mat'l.	87	87		22	
Other**	76	76		14	

* The number of contractors available through the directories were in the hundreds. The sample was chosen to represent population proportions by state.

** Other users can be defined as furniture manufacturers, cabinet manufacturers, pallet and crate manufacturers and any miscellaneous responses.

SCOPE OF THE STUDY

The study was not designed to be highly normative. Data was gathered by asking proportion, rank order, and categorical data. Although the investigators used generally accepted sampling procedures and believe the responses to be representative of the population, no parametric statistical analysis is purported to be based on a purely random sample.

The primary focus of the study is on dimension lumber and boards and millwork. The study of particle board was limited to an attempted analysis of the market and channel as experienced by the sole producer in the CSRM area and middlemen response as to the source and channel for imported materials. Because it is not now produced nor is production contemplated, the study of plywood will consist of limited questioning as to the source and channel for imported material.

Many questions in the study related to the geographical origin of the wood products sold. As the channel becomes more removed from the original producer, the less reliable the answers become.

FINDINGS PRESENTED BY RESPONDENT GROUP
ORGANIZED BY QUESTIONNAIRE
STRUCTURE

In this section of the report, the finding of the study will be presented for each of the respondent groups: Mills, Wholesalers, Retailers, and Users. This data presentation will include investigator comments as appropriate. The data presentation will be organized by the questionnaire structure. In the next section the findings will be organized and presented by the Research Questions.

Mills

There were 46 mill questionnaires returned completed.

Question #1: In what state are you located?

<u>Data:</u>	AZ	CO	NM	SD	WY	OTHER
	6.5%	45.7%	13%	15.2%	17.4%	2.2%

Comment: The response is skewed toward Colorado based mills. The 46 percent of respondents compares with an estimated 48 percent of all CSRM mills being in Colorado. This skewedness was probably influenced somewhat by the study identification with Colorado State University.

The estimated number of mills as a percentage of mills per state has to be approximate because of the large number of mill questionnaires returned as nondeliverable.

Question #2: What is your title?

<u>Data:</u>	Pres.	Owner	Mgr.	Other	N/R
	13%	34.8%	26.1%	8.7%	17.4%

Question #3: Do you market your wood products in CSRM?

Data: Yes, 84.9% No, 10.9% Both, 2.2% N/R, 2.2%

Question #4: If you do market in the CSRM area, what is your primary competition?

Data: 59% Similar products from the local area
30.8% Similar products from outside the local area
10.2% Both

Question 5: If your answer was "similar products from the local area" above, where are the wood products coming from?

<u>Data:</u>	CO	MT	WY	OTHER	ID	NM	NAT'L FOREST	MILLS CSRM
	15.2%	13.0%	10.9%	10.9%	10.9%	6.5%	6.5%	6.5%

Question #6: What of your products are most vulnerable to outside competition?

<u>Data:</u>	SF	CB	SD	LF	ST	TIM	FL	ALL	OTHER
	2.2%	6.5%	6.5%	15.2%	10.9%	10.9%	2.2%	21.7%	13.0%

Question #7: Do you think competitive products are entering your market area?

Data: Yes, 65.2% No, 23.9% N/R, 10.9%

Question #8: Indicate all reasons why competitive products are entering your market area.

- 41.3% a. Price differentials
- 32.6% b. Specification of certain species by buyers
- 19.6% c. Subjective preference for certain species by buyers
- 21.7% d. Quantity available by grade or species
- 13.0% e. Quality available within grade
- 6.5% f. Quantity available by speed of service
- 19.6% g. Buyers prefer to purchase from established buying connections where they purchase a wider range of products than locally produced
- 13.0% h. Buyers have affiliation with sole source suppliers

19.6% i. There is a bias against locally produced products

19.6% j. Other

Comment: The previous five questions should be considered together. Some 30 percent of the mills see their primary competition as coming from outside the local area and another 10 percent indicated both suggests significant outside competition. Outside the local area seems to be primarily outside the CSRM area. Nearly 22 percent of the mills say all their products are vulnerable to outside competition. Only studs, timbers, and light framing are called out as being vulnerable by more than 10 percent of the mills.

When the question dealt with some competition, as opposed to primary competition, nearly 2/3 of the mills responded positively. The reasons given for competitive products entering the market were numerous, but price differentials are cited by over 40 percent of the mills. If competitive products can enter a local market, carry transportation costs, and still compete on price, it would suggest a higher raw material cost either delivered or on the stump, lack of economies of scale in production or inefficiencies in production or marketing for CSRM products. However, the data suggest other factors are believed to make the local mills vulnerable. It may be that factors such as specie specification and preference, quantity availability, and buying relationships may be a direct cause of the price differentials. An outside supplier may be able to offer lower prices because of quantity purchase beyond the capability of CSRM mills to supply. Buyers may demand a lower price if they are going to deviate from established and familiar sources of supply. Buyers also demand a significant price differential before deviating from a special preference.

Question #9: Do you market all or most of your products in the local (CSRM) area?

Data: Yes, 54.3% No, 41.3% Both, 2.2% N/R, 2.2%

Question #10: If no, why do you not market in the local area?

Data: 8.7% a. We are a primary producer for an affiliated seller located in (please specify state).
 23.9% b. We can get better prices outside the local area
 41.3% c. There is not enough demand in the local market to absorb the local supply
 8.7% d. Other

Comment: The above 2 questions indicate that over 40 percent of the mills seek markets outside the local (CSRM) area. The fact that 24 percent indicate they can receive better prices suggest the possibility of specie and locality bias against CSRM products. There is an apparent contradiction in competitive products entering the local market and there not being enough demand in the local market to absorb the local supply. The mill response again suggests reasons associated with specie preference, quantity problems, and buying relationship. Further in the report it will be pointed out that wholesalers and retailers indicate quantity and quality variation problems.

Question #16: Please check all the species categories you regularly handle (produce) in the following wood products.

<u>Data:</u>	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Douglas Fir-Larch	2.2	4.3	6.5	6.5	10.9	13.0	2.2
Hem-Fir	2.2	2.2	6.5	4.3	4.3	--	--
Englemann Spruce	13.0	21.7	15.2	15.2	17.4	17.4	6.5
Lodgepole Pine	17.4	17.4	15.2	10.9	17.4	15.2	6.5
Ponderosa Pine	23.9	41.3	23.9	21.7	26.1	32.6	15.2
Redwood & Cedar	4.3	--	--	--	2.2	--	--
Others	2.2	2.2	--	2.2	--	8.7	2.2

Note: All values are in percentages.

Question #17: Please check what grades you handle in the following wood categories.

Data: COMMON BOARDS

45.7% No. 2 and Better
45.7% No. 3 & No. 4
34.8% No. 5
19.6% Do not carry common boards

STRUCTURAL DIMENSION

4.3% Select Structural
30.4% No. 1 & No. 2
26.1% No. 3 & Economy
21.7% Do not carry structural dimension

LIGHT FRAMING

23.9% Construction & Standard
28.3% Utility & Economy
23.9% Do not carry light framing

STUDS

28.3% Stud grade
19.6% Economy stud
17.4% Do not carry studs

FACTORY LUMBER

19.6% Moulding Stock
13.0% Moulding
13.0% Shop grades
6.5% Box stock
0 Cut sash & door stock
2.2% Jamb & head stock
28.3% Do not carry factory lumber

Comment: A total of 527 crosstabs were performed looking for evidence that mills avoided production of grades within a product category. For example, if a mill produced ponderosa pine common boards they produced all grades. An exception was in the structural dimension products where about 30 percent made #1, #2, or #3 but only one mill made select structural. An analysis of wholesaler behavior confirms this, in that there is no evidence that they cherry pick a line; that is, buy only No. 3 and No. 4 common boards from an area mill and import No. 2 and

better. Rather, they avoid or select by product category and specie, not by grade.

Question #18: Please check from what geographical areas the wood species you handle originate.

<u>Data:</u>	DOUGLAS FIR-LARCH	HEM-FIR	ENGLEMANN SPRUCE	LODGEPOLE PINE	PONDEROSA PINE	REDWOOD + CEDAR
Arizona	4.3	2.2	--	--	8.7	--
California	--	--	--	--	--	--
Colorado	2.2	--	26.1	32.6	21.7	--
New Mexico	8.7	2.2	10.9	--	13.0	--
Western South Dakota	--	--	--	--	15.2	--
Wyoming	4.3	--	13.0	15.2	8.7	--
Washington & Oregon	6.5	6.5	2.2	--	--	4.3
Idaho & Montana	4.3	--	2.2	4.3	--	--
Utah & Nevada	--	--	--	--	--	--
Canada	--	2.2	2.2	2.2	--	--
All Others	--	2.2	--	--	--	2.2

Note: All values are percentages.

Comment: The data in Question #18 was crosstabbed with state where the mill was located. As might be expected, most all of the mills were obtaining their raw material in the immediate local area. They are not importing raw material to manufacture products that would broaden their line.

Question #19: In a previous question you told me the geographical origin of the wood species you handle. Now could you please check from what geographical areas the wood products you handle originate.

Data:	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Arizona	2.2	4.3	4.3	6.5	4.3	4.3	4.3
California	--	--	--	--	--	--	--
Colorado	2.2	17.4	8.7	6.5	13.0	26.1	2.2
New Mexico	4.3	6.5	8.7	8.7	4.3	8.7	4.3
Western South Dakota	6.5	8.7	4.3	2.2	--	4.3	2.2
Wyoming	13.0	13.0	4.3	4.3	6.5	2.2	8.7
Washington & Oregon	--	--	4.3	--	--	2.2	--
Idaho & Montana	--	--	--	--	2.2	--	--
Utah & Nevada	--	--	--	--	--	--	--
Canada	2.2	--	--	--	2.2	--	--
All Others	--	--	--	--	--	--	--

Note: All values are percentages.

Comment: Question #19 dealt with the origin of wood products handled by mills. With few exceptions, the evidence is that they don't handle wood products they don't produce. It was thought that mills possibly could have purchased products to fill out a product line but there is no evidence they are doing this.

Question #20: Please check the main groups of customers to whom you sell the following wood products.

Data:	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Lumber wholesaler	19.6	23.9	19.6	13.0	10.9	13.0	8.7
Bldg. Contractor	6.5	10.9	13.0	13.0	15.2	15.2	4.3
Lumber Retailer	8.7	15.2	13.0	4.3	10.9	13.0	--
Home Center Retailer	6.5	6.5	2.2	4.3	2.2	--	--
Cabinet Manufacturer	4.3	6.5	--	--	--	--	4.3
Furniture Manufacturer	2.2	4.3	--	--	2.2	--	--
Bldg. Materials Mfr.	--	--	--	--	--	--	2.2
Other Wood Product Mfr.	--	4.3	--	--	--	4.3	8.7
Farm & Ranch Users	4.3	23.9	19.6	10.9	13.0	30.4	2.2
Household Consumer	6.5	21.7	13.0	13.0	13.0	15.2	2.2
Other (mines, utilities, govt.)	4.3	2.2	4.3	4.3	2.2	21.7	4.3

Note: All values are percentages.

Question #21: Please estimate the total percentage sales of all your wood products to each type of customer you sell.

<u>Data:</u>	Lumber Wholesaler	31.5%
	Building Contractor	10.9%
	Lumber Retailer	9.1%
	Home Center Retailer	1.2%
	Cabinet Manufacturer	1.2%
	Furniture Manufacturer	0.3%
	Bldg. Material Manufacturer	-- %
	Other Wood Products Manufacturer	7.2%
	Farm & Ranch Users	11.3%
	Household Consumer	8.6%
	Other (Mines, utility, gov't.)	18.6%
	TOTAL	99.9%

Comment: Over 58 percent of all mill sales are direct to end users. It would appear that many mills which have survived the economic downturn and apparent channel power of large producers and distributors are those which have developed specialty products they can market direct.

Question #22: Please list the states (or countries if applicable) of the main customers for the wood products you handle, in order of volume with the highest volume state first and the lowest volume state last.

<u>Data Lumber</u>	<u>1st Volume</u>	<u>2nd Volume</u>	<u>3rd Volume</u>	<u>4th Volume</u>
<u>Wholesalers:</u>	N/A 29	N/A 35	N/A 35	N/A 37
	AZ 1	CA 1	AL 1	CO 1
	CO 4	IL 2	CO 1	IL 1
	MN 1	MI 1	IL 4	KS 1
	NM 2		IN 1	
	OH 1	NB 1	IA 1	KY 2
	OR 1	NM 1	MD 1	MN 1
	TX 2	OH 1	NM 1	
	WI 2	TX 2	SD 1	OK 1
	WY 1	WY 2		WI 2
	Other nonCSRM 2			

Comment Lumber Wholesalers: Only 32 percent of the mills indicate they sell to wholesalers. The data suggest that wholesalers are used to reaching distant markets with commodity products such as select and finish lumber, common boards, structural dimension, and light framing. The findings above, (that most of the products are sold direct to end users), and the finding below (that end users tend to be in the state of the producers) are consistent with this conclusion about the use of wholesalers.

<u>Building Contractor Data:</u>	<u>1st Volume</u>	<u>2nd Volume</u>
	N/A 35	N/A 43
	AZ 1	ID 1
	CO 4	WY 1
	NM 1	
	SD 2	
	WY 3	

Comment Building Contractors: Those mills selling to contractors sell to those in their immediate area.

<u>Lumber Retailer Data:</u>	<u>1st Volume</u>	<u>2nd Volume</u>	<u>3rd Volume</u>
	N/A 32	N/A 39	N/A 41
	AZ 1	AL 2	CO 1
	CO 1	CO 1	IA 1
	MS 1	IL 1	NM 1
	NB 1	NM 1	OK 1
	NV 1	ND 1	
	NM 5	OK 1	
	SD 1		
	TX 1		
	WY 2		

Comment Lumber Retailers: The mills who sell to retailers tend to do so to reach markets outside their own state.

Home Center Retailer Data: 1st Volume

N/A 42
CO 1
MN 1
NM 1
TX 1

Other Wood Products
Manufacturers Data: 1st Volume

N/A
CO 3
MN 1
SD 1
UT 1

Farm & Ranch Users Data: 1st Volume 2nd Volume

N/A 28	N/A 39
AZ 1	CO 1
CO 7	ID 1
NM 2	WY 5
SD 4	
WY 4	

Comment Farm & Ranch Users: Consistent with other findings, sales to Farm
and Ranch users tend to be direct and local.

Household Consumers Data: 1st Volume 2nd Volume

N/A 31	N/A 42
AZ 1	CO 1
CO 8	NB 1
SD 2	UT 1
WY 4	WY 1

Comment Household Consumers: Sales to Household consumers are direct and
local.

Other (Mines, Utilities,
Gov't.) Data:

1st Volume

2nd Volume

N/A 33

N/A 38

AZ 2

CA 1

CO 6

CO 1

OK 1

KS 1

SD 2

NM 1

TX 1

TN 1

UT 1

WY 3

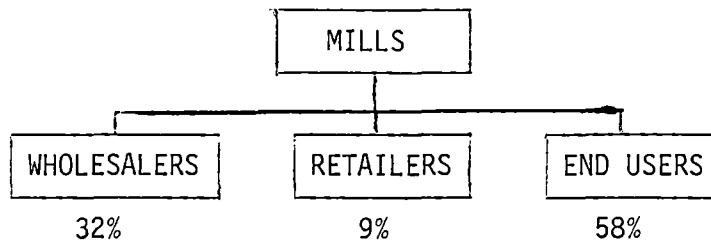
Comment Others (Mines,Utilities,Gov't): Sales to Mines, Utilities, and

Government tend to be direct, local sales. However, a few mills
seem to have developed markets in nearby states.

Mill Data Summary

As would be expected, mills in the CSRM are dealing primarily with Englemann Spruce, Lodgepole Pine and Ponderosa Pine species obtained locally. They produce a wide variety of products in nearly all grades from these species with a slightly heavier emphasis on common boards and timbers made from Ponderosa Pine.

Their main distribution pattern is illustrated as follows:
(percentages have been rounded to whole numbers for ease in reading)



The mills are competing within the CSRM with local products produced within their own state and non-local products produced in other CSRM states as well as outside the CSRM, particularly in Idaho and Montana. The most common reasons given for this competition are price differentials and species specifications by buyers.

The mills have met the competition with various solutions -- establishment of wholesale markets east of the CSRM, establishment of retailer markets east of the CSRM and establishment of sales directly to special need end users like farmers, ranchers, mines, utilities and state and federal governments.

Wholesalers

A total of 53 wholesaler questionnaires were returned completed.

Question #1: In what state are you located?

<u>Data:</u>	AZ	CO	NM	SD	WY	OTHER
	18.9%	52.8%	17%		3.8%	5.7%

Question #2: What is your title?

<u>Data:</u>	Pres.	V.P.	Owner	Mgr.	Purchasing Agent	Other	N/R
	17%	9.4%	7.5%	41.5%	9.4%	5.7%	9.4%

Question #3: How is your business best described?

<u>Data:</u>	22.6%	a. Independent lumber wholesaler broker
	39.6%	b. Independent wholesaler warehouse
	9.4%	c. Affiliated Producer Office
	7.5%	d. Independent chain home center retailer
	5.7%	e. Affiliated with retailer chain
	13.2%	g. Other wholesaler
	1.9%	N/R

Question #4: Do you purchase any wood products produced in the (CSRM) area of Arizona, New Mexico, Colorado, Wyoming and Western South Dakota?

Data: Yes, 71.7% No, 24.5% N/R, 1.9%

Comment: Almost one-fourth of the CSRM wholesalers say they do not purchase wood products from the CSRM area.

Question #5: Please identify the products you purchase from the CSRM area and reasons you purchase them from the CSRM area.

<u>Data:</u>	DFL	HF	LP	PP	SPRUCE	WW	OTHER	
	7.5%	3.8%	23%	19%	26.4%	13.2%	5.7%	
	SF	CB	SD	LF	ST	TIM	FL	PLY-PB
	3.8%	26.4%	24.5%	7.5%	28.3%	5.7%	5.7%	5.7%
								OTHER
								11.3%

Question #6: Which of the following influence your decision to purchase CSRM wood products.

<u>Data:</u>	54.7%	Price differentials	22.6%	Quality of products
	39.6%	Availability by species	11.3%	Requested/preferred by my customers
	18.9%	Availability by grade	30.2%	Established business connections
	43.4%	Speed of service	15.1%	Other

Comment: Wholesalers will buy CSRM products if the specie desired is available faster, cheaper, and through an established business connection.

Question #7: Are there any wood products you avoid purchasing from the CSRM area?

Data: Yes, 37.7% No, 54.7% DK, 1.9% N/R, 5.7%

Question #8: Please identify the products you avoid and the reasons you avoid them.

<u>Data:</u>	DFL	HF	ES	LP	PP	SPRUCE	PINE	WW	OTHER
	1.9%	--	--	--	9.4%	--	3.8%	3.8%	3.8%
	SF	CB	SD	LF	ST	TIM	FL	PLY-PB	OTHER
	1.9%	7.5%	9.4%	3.8%	3.8%	1.9%	--	3.8%	9.4%

Comment: One-fourth of the wholesalers don't purchase at all from the CSRM and 38 percent avoid some specific products. Because of the wide range of answers for this question, they are reported verbatim in Appendix C.

Question #9: Please check which of the following influence you to avoid purchasing CSRM wood products.

<u>Data:</u>	7.5%	Price differentials	11.3%	Quality variation within grade
	7.5%	Not available in quantities needed	7.5%	Affiliation with sole source supplier
	15.1%	Not available by species needed	9.4%	Customers do not prefer or request
	9.4%	Not available by grade needed		
	18.9%	Does not meet quality standards		
	15.1%	Other		

Comment: A wide variety of answers are given for not purchasing, but the quality question stands out.

Question #10: Do you handle any plywood?

Data: Yes, 81.1% No, 17.0% N/R, 1.9%

Question #11: What grades and species do you carry in plywood?

<u>Data:</u>	AB	AC	AD	CCX	CDX	OTHER
	18.9%	32.1%	28.3%	5.7%	37.7%	24.5%
	FIR	BIRCH	MAHOG	OAK	PINE	OTHER
	41.5%	11.3%	3.8%	7.5%	17.0%	24.5%

Question #12: From what states does the plywood originate and to what states do you sell?

<u>Data:</u>	States of origin	Wstrn, 77.4%	Mid W-S, 34.0%	SE, 1.9%				
	States of Customers	AZ	CO	NM	SD	WY	Wstrn	Mid W-S
		26.4%	62.3%	24.5%	3.8%	34.0%	9.4%	37.7%
		Grt. Lks	Other					
		3.8%	5.7%					

Question #13: Do you handle any particleboard?

Data: Yes, 75.5% No, 17.0% N/R, 7.6%

Question #14: From what states does the particleboard originate and to what states do you sell?

Data: States of origin NM Wstrn Mid W-S Grt. Lks. SE Other
 3.8% 66.0% 30.2% 1.9% 3.8% 3.8%

States of customers AZ CO NM SD WY Wstrn Mid W-S
 20.8% 56.6% 22.6% 3.8% 32.1% 7.5% 34.0%

 Grt. Lks. SE
 1.9% 1.9%

Question #15: Please check all the species categories you regularly handle in the following wood products.

<u>Data:</u>	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Douglas Fir-Larch	18.9	5.7	43.4	45.3	43.4	49.1	3.8
Hem-Fir	3.8	5.7	54.7	62.3	56.6	13.2	5.7
Englemann Spruce	15.1	43.4	20.8	47.2	49.1	5.7	1.9
Lodgepole Pine	11.3	26.4	13.2	37.7	45.3	1.9	1.9
Ponderosa Pine	50.9	71.7	17.0	30.2	20.8	9.4	17.0
Redwood & Cedar	39.6	35.8	17.0	22.6	5.7	18.9	5.7
Others	7.5	9.4	7.5	3.8	3.8	3.8	3.8

Note: All values are percentages.

Question #16: Please check what grades you handle in the following wood categories.

Data: COMMON BOARDS

81.1% No. 2 and Better
64.2% No. 3 & No. 4
13.2% No. 5
3.8% Do not carry common boards

STRUCTURAL DIMENSION

43.4% Select Structural
54.7% No. 1 & No. 2
18.9% No. 3 & Economy
9.4% Do not carry structural dimension

LIGHT FRAMING

67.9% Construction & Standard
24.5% Utility & Economy
5.7% Do not carry light framing

STUDS

71.7% Stud grade
35.8% Economy stud
5.7% Do not carry studs

FACTORY LUMBER

26.4% Moulding Stock
43.4% Moulding
26.4% Shop grades
13.2% Box stock
11.3% Cut sash & door stock
15.1% Jamb & head stock
26.4% Do not carry factory lumber

Comment: The data from the above two questions confirm that wholesalers carry products by specie and grade many of which could originate in the CSRM. However, both mill and wholesaler agree that most products entering the channel from wholesalers do not come from CSRM mills.

Question #17: Please check the source of supply for the following wood products.

<u>Data:</u>	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Independent mill	50.9	64.2	54.7	60.4	64.2	49.1	18.9
Affiliated mill	28.3	39.6	37.7	39.6	35.8	28.3	11.3
Office Wholesaler/Broker	11.3	24.5	26.4	37.7	34.0	22.6	3.8
Independent Warehouse Whslr.	11.3	13.2	11.3	11.3	11.3	9.4	--
Affiliated Warehouse Whslr.	5.7	9.4	9.4	11.3	11.3	7.5	--
Millwork Plant	11.3	5.7	--	--	--	--	1.9
Retailer	--	--	--	--	--	--	--
Other	1.9	1.9	--	--	--	--	--

Note: All values are percentages.

Comment: As would be expected, a majority of the wholesalers are purchasing direct from independent mills. A substantial number purchase from affiliated mills and some purchasing is done through brokers.

Question #18: From what geographical areas do the wood species you handle originate?

<u>Data:</u>	DOUGLAS FIR - LARCH	HEM-FIR	ENGLEMAN SPRUCE	LODGEPOLE PINE	PONDEROSA PINE	REDWOOD + CEDAR
Arizona	11.3	5.7	9.4	3.8	26.4	--
California	11.3	41.5	5.7	1.9	34.0	41.5
Colorado	13.2	9.4	41.5	28.3	22.6	--
New Mexico	13.2	11.3	15.1	3.8	22.6	--
Western South Dakota	--	--	--	--	7.5	--
Wyoming	9.4	3.8	26.4	32.1	13.2	--
Washington & Oregon	62.3	66.0	11.3	17.0	62.3	30.2
Idaho & Montana	41.5	45.3	37.7	45.3	39.6	11.3
Utah & Nevada	1.9	5.7	5.7	1.9	9.4	--
Canada	15.1	20.8	30.2	20.8	9.4	15.1
All Others	1.9	--	--	--	1.9	1.9

Note: All values are percentages.

Question #19: From what geographical areas do the wood products you handle originate?

Data:	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Arizona	7.5	18.9	5.7	17.0	3.8	5.7	9.4
California	24.5	32.1	26.4	24.5	9.4	11.3	9.4
Colorado	11.3	18.9	13.2	30.2	20.8	3.8	3.8
New Mexico	5.7	17.0	5.7	15.1	13.2	9.4	3.8
Western South Dakota	3.8	5.7	--	1.9	1.9	1.9	--
Wyoming	1.9	5.7	7.5	13.2	20.8	1.9	--
Washington & Oregon	47.2	45.3	43.4	43.4	35.8	30.2	13.2
Idaho & Montana	30.2	30.2	30.2	39.6	39.6	15.1	7.5
Utah & Nevada	--	9.4	1.9	5.7	1.9	1.9	1.9
Canada	7.5	9.4	30.2	26.4	24.5	5.7	--
All Others	3.8	1.9	--	--	--	--	--

Note: All values are percentages.

Comment: The above two questions show that wood products are being produced in the state where the specie is being grown. The most significant fact is that CSRM wholesalers are obtaining relatively small amounts of product from the CSRM area. This confirms what CSRM mills said about to whom they sell their output.

Question #20: What are the main groups of customers to whom you sell the following wood products?

Data:	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Lumber wholesaler	13.2	17.0	17.0	17.0	18.9	15.1	3.8
Bldg. Contractor	13.2	15.1	11.3	11.3	11.3	9.4	1.9
Lumber Retailer	60.4	62.3	49.1	58.5	60.4	45.3	15.1
Home Center Retailer	37.7	39.6	28.3	37.7	37.7	20.8	3.8
Cabinet Manufacturer	24.5	13.2	3.8	1.9	1.9	--	7.5
Furniture Manufacturer	22.6	20.8	5.7	3.8	3.8	1.9	9.4
Bldg. Materials Mfr.	5.7	5.7	3.8	5.7	3.8	--	--
Other Wood Product Mfr.	9.4	13.2	3.8	5.7	--	--	7.5
Farm & Ranch Users	5.7	3.8	3.8	7.5	7.5	3.8	1.9
Household Consumer	9.4	9.4	5.7	7.5	9.4	5.7	1.9
Other	7.5	7.5	5.7	5.7	5.7	7.5	5.7

Comment: The primary customers for wholesalers are retailers. Comparatively few wholesalers have as primary customers, any of the end users with the exception of wood product manufacturers who tend to purchase selects and finish and common boards.

Question #21: Please estimate the total percentage sales of all your wood products to each type of customer you sell.

Lumber Wholesaler	4.5%
Building Contractor	9.7%
Lumber Retailer	49.2%
Home Center Retailer	8.7%
Cabinet Manufacturer	7.9%
Furniture Manufacturer	5.1%
Bldg. Material Manufacturer	2.6%
Other Wood Products Manufacturer	2.5%
Farm & Ranch Users	0.2%
Household Consumer	2.3%
Other	7.4%
Total	100.1%

Comment: The data show the wholesalers' primary outlets to be retailers (57.9%). Less than 10% of the wholesalers' volume is going to building contractors compared to the retailers' volume percent of 56.6% for contractors. Even though it amounts to a relatively small percent of their total business, wholesalers are the primary source for cabinet, furniture, and building material manufacturers.

Question #22: List the states of the main customers for the wood products you handle, in order of volume with the highest volume state first and the lowest volume state last.

<u>Data:</u>	<u>Contractor</u>	<u>1st Volume</u>	<u>2nd Volume</u>
		N/A 44	N/A 47
		AZ 1	CO 3
		CO 4	NB 1
		FL 1	WY 2
		NM 2	
		WY 1	

<u>Lumber Retailer</u>	<u>1st Volume</u>	<u>2nd Volume</u>
	N/A 14	N/A 25
	AZ 9	AZ 2
	CO 22	CA 1
	NB 1	CO 4
	NM 5	WY 14
	TX 2	NM 1
		NB 1
		OT 3

<u>Home Center Retailer</u>	<u>1st Volume</u>	<u>2nd Volume</u>
	N/A 26	N/A 32
	AZ 7	AZ 1
	CO 14	CA 1
	NB 1	CO 2
	NM 4	NM 3
	TX 1	WY 10
		OT 3

<u>Cabinet Manufacturer</u>	<u>1st Volume</u>	<u>2nd Volume</u>
	N/A 36	N/A 46
	AZ 5	CO 6
	CO 6	KS 17
	NM 4	NB 1
	TX 1	WY 3
	WY 1	OT 1

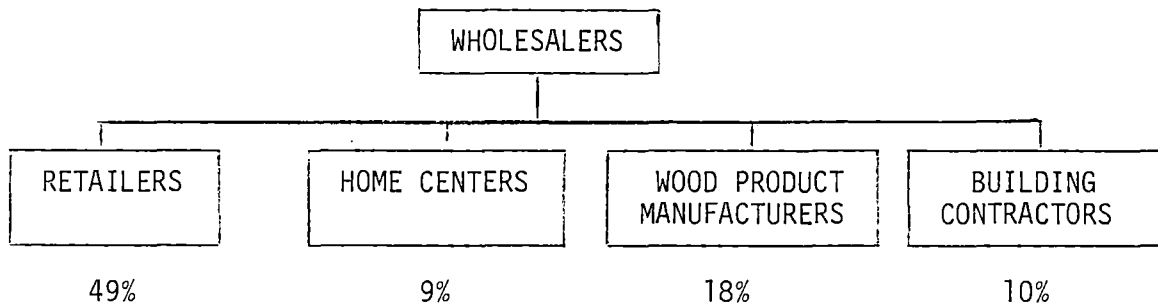
<u>Furniture Manufacturer</u>	<u>1st Volume</u>	<u>2nd Volume</u>
	N/A 33	N/A 44
	AZ 6	AR 1
	CA 2	CO 2
	CO 8	TX 1
	NM 4	WY 1
		OT 1

Comment: Although a few wholesalers have developed business in other (usually nearby) states, most of their volume is in the state where they are located.

Wholesaler Data Summary

CSRM wholesalers carry and offer to their markets a wide variety of species and grades of wood products. Although some products are purchased locally, strong competition exists because of species imported from Washington, Oregon, Idaho and to a lesser extent Canada. These states and Canada strongly distribute every major wood product category mentioned in the survey to wholesalers withing the CSRM.

The wholesaler is then channeling these non-CSRM products through the distribution chain. The main distribution pattern is illustrated as follows: (percentages have been rounded to whole numbers for ease in reading)



Although some wholesalers are selling to markets east of the CSRM, most sales are intrastate or to short distance neighboring states. Wholesalers, dealing with established business connections at the supplier level, tend to buy CSRM products which meet price and species requirements within the demanded time constraints. They tend to avoid CSRM products not only because the species they need is not available, but also because of the lack of quality standards.

Because of their need to carry the wide species and product lines their customers require, wholesalers must establish business connections outside the CSRM. It is believed that this contributes to added purchases of products which compete with those locally produced.

Retailers

There were 71 retailers who responded to the questionnaire.

Question #1: In what state are you located?

<u>Data:</u>	AZ	CO	NM	SD	WY	OTHER	N/R
	18.3%	56.3%	11.3%	4.2%	8.5%	0	1.4%

Question #2: What is your title?

<u>Data:</u>	Pres.	V.P.	Owner	Mgr.	Purch.	Other	N/R
	19.7%	9.9%	8.5%	43.7%	4.2%	9.9%	4.2%

Question #3: How is your business best described?

<u>Data:</u>	46.5%	a. Independent lumber retailer
	26.8%	b. Independent chain lumber retailer
	5.6%	c. Independent home center retailer
	11.3%	d. Independent chain home center retailer
	1.4%	f. Affiliated with manufacturer
	5.6%	g. Other
	1.4%	N/R

Question #4: Do you purchase any wood products produced in the (CSRM) area of Arizona, New Mexico, Colorado, Wyoming and Western South Dakota?

Data: Yes, 63.4% No, 32.4% N/R, 4.2%

Comment: Almost one-third of the CSRM area retailers do not sell CSRM area products.

Question #5: Identify the products you purchase from the CSRM area and reasons you purchase them from the CSRM area.

<u>Data:</u>	DFL	HF	ES	LP	PP	SPRUCE	PINE	WW	OTHER
	4.2%	1.4%	2.8%	1.4%	4.2%	16.9%	18.3%	8.5%	1.4%
	SF	CB	SD	LF	ST	TIM	FL	PLY-PB	OTHER
	2.8%	21.1%	21.1%	--	14.1%	5.6%	7.0%	2.8%	8.5%

Question #6: What influenced your decision to purchase CSRM wood products?

Data: 42.3% Price differentials 21.1% Quality of products
 33.8% Availability by species 7.0% Requested/preferred by my customers
 23.9% Availability by grade 33.8% Established business connections
 40.8% Speed of service 7.0% Other

Comment: As with the wholesalers; the retailers seem to say "we buy CSRM products if we can get them cheaper, faster, and from an established business connection."

Question #7: Are there any wood products you avoid purchasing from the CSRM area?

Data: Yes, 38.0% No, 47.9% N/R, 14.1%

Question #8: Please identify the products you avoid and the reasons you avoid them.

<u>Data:</u>	DFL	HF	ES	LP	PP	SPRUCE	PINE	WW	OTHER
	7.0%	5.6%	4.2%	7.0%	7.0%	5.6%	5.6%	4.2%	7.0%
	SF	CB	SD	LF	ST	TIM	FL	PLY-PB	OTHER
	1.4%	2.8%	16.9%	5.6%	2.8%	2.8%	1.4%	1.4%	1.4%

Question #9: What influences you to avoid purchasing CSRM wood products?

<u>Data:</u>	7.0%	Price differentials	12.7%	Quality does not meet bldg. code stds.
	4.2%	Not available in quantities needed		
	18.3%	Not available by species needed	9.9%	Quality variation within grade
	15.5%	Not available by grade needed	1.4%	Affiliation with sole source supplier
	22.5%	Does not meet quality standards		
	5.6%	Other	7.0%	Customers do not prefer or request

Comment: The above three questions show that a large portion of the retailers avoid purchasing some CSRM products. Except for Structural Dimension material, the avoidance does not seem to be focused. The lower quality perception once again seems to stand out dramatically.

Question #10: Do you handle any plywood?

Data: Yes, 94.4% No, 4.2%

Question #11: What grades and species do you carry in plywood?

<u>Data:</u>	AB	AC	AD	CCX	CDX	OTHER
	40.8%	60.6%	47.9%	15.5%	70.4%	46.5%
	Fir	Birch	Mahog.	Oak	Pine	Other
	62.0%	22.5%	18.3%	16.9%	9.9%	18.3%

Question #12: From what states does the plywood originate and to what states do you sell?

<u>Data:</u>	States of origin	AZ	CO	NM	SD	WY	Wstrn	Mid W-S
		--	--	--	--	--	83.1%	12.7%
		Grt. Lks.		NE	SE	Other		
		--		--	4.2%	4.2%		
	States of customers	AZ	CO	NM	SD	WY	Wstrn	Mid W-S
		18.3%	53.5%	12.7%	7.0%	15.5%	5.6%	5.6%
		Grt. Lks.		NE	SE	Other		
		1.4%		1.4%	1.4%	1.4%		

Question #13: Do you handle any particleboard?

Data: Yes, 91.5% No, 4.2% N/R, 4.2%

Question #14: From what states does the particleboard originate and to what states do you sell?

<u>Data:</u>	States of origin	AZ	CO	NM	SD	WY	Wstrn	Mid W-S
		--	1.4%	1.4%	--	--	67.6%	14.1%
		Grt. Lks.		NE	SE			
		1.4%		--	4.2%			
	States of customers	AZ	CO	NM	SD	WY	Wstrn	
		18.0%	54.9%	12.7%	5.6%	15.5%	5.6%	
		Mid W-S		Grt. Lks.	NE	SE		
		2.8%		1.4%	1.4%	1.4%		

Question #15: What species categories do you regularly handle in wood products?

<u>Data:</u>	<u>SELECTS + FINISH</u>	<u>COMMON BOARDS</u>	<u>STRUCTURAL DIMENSION</u>	<u>LIGHT FRAMING</u>	<u>STUDS</u>	<u>TIMBERS</u>	<u>FACTORY LUMBER</u>
Douglas Fir-Larch	12.7	8.5	49.3	31.0	29.6	59.2	5.6
Hem-Fir	2.8	8.5	52.1	59.2	45.1	9.9	2.8
Englemann Spruce	9.9	40.8	5.6	21.1	28.2	2.8	2.8
Lodgepole Pine	2.8	25.4	4.2	19.7	35.2	2.8	2.8
Ponderosa Pine	52.1	69.0	12.7	16.9	19.7	7.0	19.7
Redwood & Cedar	54.9	59.2	15.5	26.8	8.5	12.7	2.8
Others	9.9	5.6	1.4	1.4	4.2	1.4	

Note: All values are percentages.

Question #16: What grades do you handle in the following wood categories?

Data: COMMON BOARDS

80.3% No. 2 and Better
 73.2% No. 3 & No. 4
 2.8% No. 5
 Do not carry common boards

STRUCTURAL DIMENSION

25.4% Select Structural
 81.7% No. 1 & No. 2
 11.3% No. 3 & Economy
 Do not carry structural dimension

LIGHT FRAMING

78.9% Construction & Standard
 14.1% Utility & Economy
 5.6% Do not carry light framing

STUDS

87.3% Stud grade
 29.6% Economy stud
 4.2% Do not carry studs

FACTORY LUMBER

36.6% Moulding Stock
 53.5% Moulding
 2.8% Shop grades
 2.8% Box stock
 21.1% Cut sash & door stock
 45.1% Jamb & head stock
 18.3% Do not carry factory lumber

Comment: The profile of products by species and grade for retailers is very close to that of the wholesalers which the next question shows to be the retailers' primary source of supply.

Question #17: What is the source of supply for the following wood products?

<u>Data:</u>	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Independent mill	9.9	23.9	23.9	21.1	22.5	22.5	7.0
Affiliated mill	9.9	19.7	21.1	26.8	28.2	15.5	8.5
Office Wholesaler/Broker	23.9	46.5	45.1	47.9	49.3	29.6	8.5
Independent Warehouse Whsler.	42.3	45.1	36.6	40.8	39.4	38.0	22.5
Affiliated Warehouse Whsler.	33.8	39.4	40.8	45.1	46.5	35.2	23.9
Millwork Plant	5.6	4.2	2.8	2.8	2.8	2.8	5.6
Retailer	--	1.4	1.4	1.4	1.4	1.4	--
Other	1.4	--	--	--	--	--	--

Note: All values are percentages.

Comment: This data is consistent with that from wholesalers and mills. Less than a fourth of the retailers purchase any products from mills. It is apparent that the retailer and therefore his customers are restricted to the wholesalers' offering.

Question #18: From what geographical areas do the wood species you handle originate?

<u>Data:</u>	DOUGLAS FIR-LARCH	HEM-FIR	ENGLEMANN SPRUCE	LODGEPOLE PINE	PONDEROSA PINE	REDWOOD + CEDAR
Arizona	5.6	4.2	5.6	--	15.5	--
California	14.1	25.4	2.8	2.8	9.9	46.5
Colorado	7.0	2.8	15.5	9.9	12.7	--
New Mexico	4.2	1.4	5.6	1.4	8.5	--
Western South Dakota	--	--	1.4	2.8	2.8	--
Wyoming	1.4	1.4	11.3	9.9	2.8	--
Washington & Oregon	59.2	54.9	23.9	16.9	38.0	35.2
Idaho & Montana	18.3	45.1	31.0	26.8	31.0	8.5
Utah & Nevada	1.4	--	4.2	--	1.4	--
Canada	15.5	15.5	15.5	11.3	5.6	14.1
All Others	--	1.4	1.4	1.4	1.4	--

Note: All values are percentages.

Question #19: What geographical areas do the wood products you handle originate?

<u>Data:</u>	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Arizona	1.4	12.7	7.0	12.7	1.4	4.2	--
California	9.9	9.9	8.5	8.5	4.2	12.7	1.4
Colorado	2.8	9.9	2.8	9.9	9.9	4.2	1.4
New Mexico	4.2	9.9	5.6	11.3	4.2	1.4	7.0
Western South Dakota	--	2.8	--	2.8	--	--	1.4
Wyoming	--	5.6	--	7.0	5.6	--	1.4
Washington & Oregon	29.6	29.6	33.8	33.8	32.4	33.8	9.9
Idaho & Montana	19.7	28.2	16.9	28.2	33.8	11.3	7.0
Utah & Nevada	--	1.4	--	--	1.4	--	--
Canada	7.0	8.5	9.9	16.9	9.9	7.0	2.8
All Others	1.4	--	--	--	--	--	2.8

Note: All values are percentages.

Comment: The CSRM area retailers are handling materials from species
originating and manufactured outside the CSRM area.

Question #20: What main group of customers do you sell the following wood
products?

<u>Data:</u>	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Lumber wholesaler	1.4	4.2	4.2	5.6	4.2	4.2	1.4
Bldg. Contractor	69.0	81.7	76.1	77.5	78.9	69.0	33.8
Lumber Retailer	8.5	8.5	7.0	4.2	5.6	4.2	--
Home Center Retailer	8.5	9.9	11.3	11.3	9.9	7.0	2.8
Cabinet Manufacturer	16.9	12.7	4.2	4.2	1.4	--	4.2
Furniture Manufacturer	8.5	9.9	4.2	2.8	--	1.4	1.4
Bldg. Materials Mfr.	1.4	--	2.8	--	--	--	--
Other Wood Product Mfr.	5.6	7.0	1.4	2.8	1.4	2.8	1.4
Farm & Ranch Users	23.9	45.1	40.8	40.8	36.6	38.0	16.9
Household Consumer	64.8	73.2	53.5	69.0	63.4	47.9	39.4
Other	4.2	5.6	5.6	7.0	7.0	5.6	1.4

Note: All values are percentages.

Comment: The retailers' main groups of customers are, as would be expected, contractors, household consumers, and farm and ranch users.

Question #21: Please estimate the total percentage sales of all your wood products to each type of customer you sell.

Lumber Wholesaler	0.2%
Building Contractor	56.6%
Lumber Retailer	1.2%
Home Center Retailer	2.3%
Cabinet Manufacturer	1.1%
Furniture Manufacturer	1.0%
Bldg. Material Manufacturer	0.1%
Other Wood Products Manufacturer	0.2%
Farm & Ranch Users	8.8%
Household Consumer	26.3%
Other	2.2%
Total	100.0%

Comment: These percentage volume answers confirm in the aggregate the data by product category.

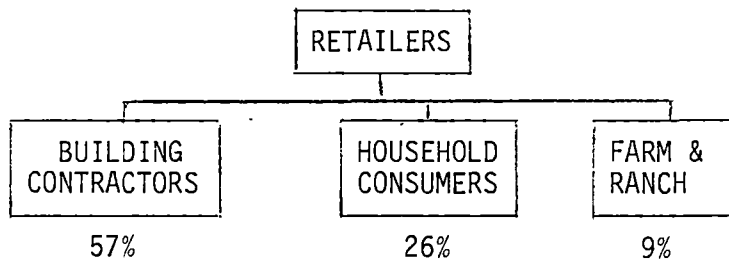
Question #22: List the states of the main customers for the wood products you handle, in order of volume with the highest volume state first and the lowest volume state last.

Comment: As would be expected, the retailers 1st Volume for each category was to customers in their own state. In a few cases the 2nd Volume was to customers in adjoining states. For example, New Mexico retailers selling to Texas contractors and Wyoming retailers selling to Utah farm and ranch users.

Retailer Data Summary

Retailers, like wholesalers, are carrying a wide selection of wood products, but they are not as likely to carry every product in nearly all species (with the possible exception of studs). The main competition comes from products and wood species of Washington, Oregon, Idaho and Montana.

The main distribution pattern for the retailer is as follows:
(percentages have been rounded to whole numbers for ease in reading)



These main customers tend to be in the same state as the retailer. In a few cases customers are from neighboring states.

Almost one-third of the retailers do not purchase any CSRM wood products while nearly half avoid some types of CSRM wood products. Although all types of reasons were cited for this, the main categorical responses centered around unavailability by species needed or inability to meet quality standards. Structural dimension products were the ones most likely to be avoided by the retailer.

Users

There were 52 respondents from users including 22 building material manufacturers, 17 contractors, and 14 furniture cabinet and wood products manufacturers. The user data was gathered as a validity check on the channel structure as reported by channel members. The following data presentation separates the users into contractors and manufacturers. Because the findings so closely parallel those described by channel members, comments are reserved for the end of the data presentation for each group.

Users--Manufacturer

Question #1: In what state are you located?

<u>Data:</u>	AZ	CO	NM	WY	SD	N/R
	20.0%	28.6%	25.7%	11.4%	5.7%	8.6%

Question #2: What is your title?

<u>Data:</u>	Pres	VP	Owner	Mgr	Other	N/R
	20.0%	11.4%	22.9%	14.2%	11.4%	20.0%

Question #3: How is your business best described?

<u>Data:</u>	31.4%	a. Millwork - Moulding manufacturer
	2.9%	b. Truss manufacturer
	22.9%	c. Cabinets
	17.1%	d. Furniture
	5.7%	e. Fixture
	17.1%	f. Crate, pallet
	4.1%	g. Other

Question #4: Do you purchase any wood products produced in the CSRM area of Arizona, New Mexico, Colorado, Wyoming and Western South Dakota?

<u>Data:</u>	Yes, 77.1%	No, 17.1%	Don't Know, 5.7%
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Question #5: Please identify the products you purchase from the CSRM area.

Data: Pine, 17.1% PP, 5.7% LP, 2.9%, Spruce, 2.9% TIM, 5.7% FL, 14.3%

Question #6: Which of the following influence your decision to purchase CSRM wood products.

Data: 42.8% Price differentials 17.1% Quality of products
37.1% Availability by species 11.4% Requested/preferred by my customers
28.6% Availability by grade 45.7% Established business connections
34.3% Speed of service 2.8% Other

Question #7: Are there any wood products you avoid purchasing from the CSRM area?

Data: Yes, 31.4% No, 57.1% N/R, 11.5%

Question #8: Please identify the products you avoid.

Data: Pine, 11.4% Fir, 8.6% Spruce, 2.8%

Question #9: Which of the following influence you to avoid purchasing CSRM wood products?

Data: 5.7% Price differentials
8.6% Not available in quantities needed
17.1% Not available by species needed
8.6% Not available by grade needed
25.7% Does not meet quality standards
11.4% Quality variation within grade
2.9% Other

Question #10: Do you handle any plywood?

Data: Yes, 60.0% No, 40.0%

Question #11: What grades and species do you carry in plywood?

Data: AB AC AD CCX CDX FIR HDWD Other
5.7% 8.6% 8.6% 2.8% 14.3% 11.4% 25.7% 11.4%

Question #12: From what states does the plywood originate?

Data: Wstrn Mid W-S Grt. Lks. East Don't Know
 25.7% 5.8% 5.8% 5.8% 20.0%

Question #13: Do you handle any particleboard?

Data: Yes, 37.1% No, 60.0% N/R, 2.8%

Question #14: From what states does the particleboard originate?

Data: West, 17.1% NM, 8.6% DK, 11.4%

Question #15: Which species category do you regularly use in the following wood products?

<u>Data:</u>	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Douglas Fir-Larch	5.7	5.7	14.3	14.3	20.0	11.4	20.0
Hem-Fir	2.9	11.4	14.3	11.4	17.1	2.9	5.7
Englemann Spruce	2.9	14.3	5.7	5.7	8.6	2.9	5.7
Lodgepole Pine	5.7	8.6	2.9	5.7	11.4	2.9	5.7
Ponderosa Pine	31.4	31.4	8.6	14.3	22.9	5.7	31.4
Redwood & Cedar	11.4	5.7	2.9	--	--	--	5.7
Others	8.6	11.4	--	--	--	--	8.6

Note: All values are percentages.

Question #16: What grades do you use in the following wood categories?

Data: COMMON BOARDS

37.1% No. 2 and Better
 22.9% No. 3 & No. 4
 11.4% No. 5
 20.0% Do not carry common boards
 20.0% N/R

STRUCTURAL DIMENSION

8.6% Select Structural
 17.1% No. 1 & No. 2
 17.1% No. 3 & Economy
 34.3% Do not carry structural dimension
 28.6% N/R

LIGHT FRAMING

14.3% Construction & Standard
 14.3% Utility & Economy
 28.6% Do not carry light framing
 31.4% N/R

STUDS

22.9% Stud grade
 14.3% Economy stud
 31.4% Do not carry studs
 25.7% N/R

FACTORY LUMBER

34.3% Moulding Stock
 22.9% Moulding
 25.7% Shop grades
 11.4% Box stock
 2.9% Cut sash & door stock
 5.7% Jamb & head stock
 20.0% Do not carry factory lumber
 17.1% N/R

Question #17: What is the source of supply for the following wood products?

Data:

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Independent mill	20.0	28.6	5.7	5.7	11.4	14.3	28.6
Affiliated mill	5.7	8.6	2.9	2.9	8.6	5.7	11.4
Office Wholesaler/Broker	14.3	20.0	8.6	8.6	11.4	8.6	14.9
Independent Warehouse Whslr.	17.1	14.9	8.6	5.7	8.6	8.6	8.6
Affiliated Warehouse Whslr.	11.4	11.4	2.9	2.9	5.7	5.7	2.9
Millwork Plant	2.9	2.9	--	--	5.7	2.9	5.7
Retailer	--	2.9	--	--	--	--	--
Other	--	--	--	--	--	--	--

Note: All values are percentages.

Question #18: From what geographical areas do the wood species you use originate?

Data:	DOUGLAS FIR-LARCH	HEM-FIR	ENGLEMANN SPRUCE	LODGEPOLE PINE	PONDEROSA PINE	REDWOOD + CEDAR
Arizona	14.2	5.7	2.9	--	34.3	--
California	20.0	20.0	--	--	25.7	14.2
Colorado	11.4	2.9	14.2	20.0	22.9	--
New Mexico	11.4	5.7	8.6	--	25.7	--
Western South Dakota	2.9	--	5.7	5.7	8.6	--
Wyoming	--	2.9	5.7	8.6	8.6	--
Washington & Oregon	22.9	14.2	5.7	2.9	22.9	5.7
Idaho & Montana	5.7	5.7	11.4	11.4	17.1	--
Utah & Nevada	2.9	--	2.9	2.9	5.7	--
Canada	--	2.9	14.2	8.6	5.7	--
All Others	--	--	--	--	--	--

20.0% I do not know the state of origin of the wood species I use,
Note: All values are percentages.

Question #19: From what geographical areas do the wood products you use originate?

Data:	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Arizona	14.2	8.6	2.9	5.7	5.7	2.9	14.2
California	5.7	2.9	--	--	--	--	14.2
Colorado	5.7	8.6	--	2.9	14.2	5.7	2.9
New Mexico	11.4	5.7	2.9	5.7	5.7	2.9	14.2
Western South Dakota	2.9	5.7	--	--	2.9	--	--
Wyoming	5.7	2.9	--	--	5.7	2.9	2.9
Washington & Oregon	5.7	5.7	5.7	2.9	5.7	5.7	17.1
Idaho & Montana	5.7	5.7	--	2.9	2.9	--	8.6
Utah & Nevada	8.6	2.9	--	--	2.9	--	5.7
Canada	--	2.9	--	2.9	2.9	--	--
All Others	--	--	--	--	--	--	--

25.7% I do not know the state of origin of the wood products I use,
Note: All values are percentages.

Comment: The manufacturers' behavior closely follows what would be expected based on channel member descriptions. Most (77 percent) of them purchase some products from the CSRM area. Their purchase decision reasons are highly influenced by the importance of established business connections (45.7 percent), price (42.8 percent), availability (37 percent species) (28 percent grade), and speed of service (34.8 percent).

The fact that 35 percent of the manufacturers say they avoid CSRM products seems to be primarily a quality concern.

The manufacturers' statements of product/specie/grade used is consistent with what channel members say they sell. The manufacturers' stated source of supply parallels that described by the wholesalers and retailers. There is a dominant usage of wholesalers and almost no purchasing from retailers. Independent mills are a source of selected products for one-fourth or less of the manufacturers.

A significant percentage of the manufacturers do not know the geographical origin of the species (20 percent) or products (25 percent) they use.

Users--Contractors

Question #1: In what state are you located?

<u>Data:</u>	AZ	CO	NM	WY	Other
	29.4%	47.1%	17.6%	5.9%	--

Question #2: What is your title?

<u>Data:</u>	Pres	Owner	Mgr	Other
	52.9%	17.6%	23.5%	5.9%

Question #3: How is your business best described?

Data: 35.3% a. Builder of residential structures
17.6% b. Builder of commercial structures
23.5% c. Builder of both residential and commercial structures
23.5% d. Other

Question #4: Do you purchase any wood products produced in the CSRM area of Arizona, New Mexico, Colorado, Wyoming and Western South Dakota?

Data: Yes, 47.1% No, 23.5% Don't Know, 29.4%

Question #5: Identify the products you purchase from the CSRM area.

<u>Data:</u>	DFL	Spruce	Pine	PLY-PB	Other Species	Other Products
	5.9%	11.8%	17.6%	5.9%	5.9%	11.8%

Question #6: Which of the following influence your decision to purchase CSRM wood products?

<u>Data:</u>	23.5%	Price differentials	17.6%	Quality of products
	17.6%	Availability by species	11.8%	Requested/preferred by my customers
	5.9%	Availability by grade	29.4%	Established business connections
	17.6%	Speed of service	5.9%	Other

Question #7: Are there any wood products you avoid purchasing from the CSRM area?

Data: Yes, 5.9% No, 64.7% Don't know, 35.3%

Question #8: Please identify the products you avoid.

Data: Nine listed, no two responses alike.

Question #9: Which of the following influence you to avoid purchasing CSRM wood products?

Data 5.9% Not available by grade needed
5.9% Does not meet quality standards
5.9% Quality does not meet bldg. code stds.
5.9% Other

Question #10: Do you handle any plywood?

Data: Yes, 76.5% No, 11.8% N/R, 11.8%

Question #11: What grades and species do you carry in plywood?

<u>Data:</u>	AB	AC	AD	CCX	CDX	Other	Fir	Other Species
	5.9%	23.5%	17.8%	5.9%	41.2%	41.2%	23.5%	5.9%

Question #12: From what states does the plywood originate?

Data: Northwest, 52.9% CO, 5.9% AZ, 5.9% Mid W-S, 5.9%

Question #13: Do you handle any particleboard?

Data: Yes, 29.4% No, 64.7% N/R, 5.9%

Question #14: From what states does the particleboard originate?

Data: Northwest, 5.9% NM, 11.8% Mid W-S, 5.9%

Question #15: What species categories do you regularly use in the following wood products?

<u>Data:</u>	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Douglas Fir-Larch	17.6	29.4	58.8	29.4	35.3	23.5	11.8
Hem-Fir	5.9	47.1	41.2	35.3	29.4	17.6	5.9
Englemann Spruce	--	17.6	--	17.6	11.8	5.9	5.9
Lodgepole Pine	11.8	11.8	--	17.6	11.8	--	11.8
Ponderosa Pine	11.8	23.5	5.9	17.6	17.6	5.9	5.9
Redwood & Cedar	41.2	17.6	17.6	5.9	--	5.9	5.9
Others	--	--	--	--	--	--	--

N/R 23.5%

Note: all values are percentages.

Question #16: What grades do you use in the following wood categories?

Data: COMMON BOARDS
 58.8% No. 2 and Better
 35.3% No. 3 & No. 4
 5.9% No. 5
 -- Do not carry common boards
 35.3% N/R
STRUCTURAL DIMENSION
 35.3% Select Structural
 52.9% No. 1 & No. 2
 5.9% No. 3 & Economy
 -- Do not carry structural dimension
 29.4% N/R
LIGHT FRAMING
 58.8% Construction & Standard
 11.8% Utility & Economy
 -- Do not carry light framing
 41.2% N/R
STUDS
 70.6% Stud grade
 -- Economy stud
 -- Do not carry studs
 29.4% N/R
FACTORY LUMBER
 29.4% Moulding Stock
 41.2% Moulding
 11.8% Shop grades
 -- Box stock
 11.8% Cut sash & door stock
 29.4% Jamb & head stock
 17.6% Do not carry factory lumber
 41.2% N/R

Question #17: What is the source of supply for the following wood products?

<u>Data:</u>	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Independent mill	5.9	5.9	11.8	17.6	11.8	23.5	5.9
Affiliated mill	--	--	5.9	--	--	--	--
Office Wholesaler/Broker	5.9	5.9	17.6	17.6	11.8	5.9	11.8
Independent Warehouse Whslr.	11.8	17.6	23.5	17.6	17.6	17.6	5.9
Affiliated Warehouse Whslr.	17.6	11.8	11.8	11.8	11.8	11.8	5.9
Millwork Plant	5.9	--	--	--	--	--	--
Retailer	41.2	52.9	52.9	52.9	52.9	47.1	35.3
Other	--	--	--	--	--	--	--

Note: All values are percentages.

Question #18: From what geographical areas do the wood species you use originate?

Data:

	DOUGLAS FIR-LARCH	HEM-FIR	ENGLEMANN SPRUCE	LOGEPOLE PINE	PONDEROSA PINE	REDWOOD + CEDAR
Arizona	5.9				5.9	
California	11.8	17.6				11.8
Colorado			11.8		17.6	
New Mexico			17.6		11.8	5.9
Western South Dakota						
Wyoming						
Washington & Oregon	23.5	17.6				5.9
Idaho & Montana	5.9	5.9	5.9	11.8		
Utah & Nevada						
Canada						
All Others						

Note: All values are percentages.

47.1%--Don't know the state of origin of the wood species.

41.2%--Buy in CSRM area

5.9%--Buy outside CSRM area

Question #19: From what geographical areas do the wood products you use originate?

Data:

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Arizona	5.9		5.9		5.9		
California	5.9		5.9				
Colorado	5.9	5.9		5.9	5.9		
New Mexico		5.9		5.9	5.9	11.8	5.9
Western South Dakota		5.9	5.9				
Wyoming				5.9			
Washington & Oregon	5.9	5.9	23.5	5.9	5.9	11.8	
Idaho & Montana	5.9	5.9		17.6	11.8		
Utah & Nevada							
Canada							
All Others							

Note: All values are percentages.

52.9%--Don't know the state of origin of the wood products.

47.0%--Buy in CSRM area

5.9%--Buy outside CSRM area

Comment: A significant finding that stands out about the contractors is their lack of familiarity about the sources of the products they purchase. They apparently rely heavily on the channel to provide products appropriate for their needs.

Less than half (47 percent) say they purchase CSRM products, but this is influenced by 29 percent who say they don't know the origination of their products. Established business connections (29.4 percent) and price differentials are key purchase decision variables. Further, 35 percent don't know if they avoid CSRM products. The specie and grades used are consistent with previous findings as is the source of supply. Retailers are the dominant source of supply (50+ percent) followed by wholesalers (about 30 percent). Independent mills are used for some contractors as a source of supply for some products, particularly light framing (17.6 percent) and timber (23.5 percent).

Combining don't know (50+ percent) and nonresponse (11.8 percent), it is apparent that as many as 60 percent of the contractors do not know the origin by specie or product of the materials they purchase.

User Data Summary

Users were divided into two groups, contractors and manufacturers of wood products. Both contractors and manufacturers are buying wood products which meet their specification needs. Contractors, who generally purchase through retailers, generally are not concerned with buying locally vs. non-locally produced products. In fact, many do not even know the geographical origin of the wood species and products they purchase. Manufacturers do avoid some CSRM products, once again due to lack of availability of needed species or the lack of quality of the products they need.

The main purchasing pattern for the users is shown below: (percentages were not specified for purchasing information)



As would be expected, manufacturers are buying greater amounts of factory lumber, selects and finish and common boards than other product categories. The contractors tend to have a broader need for all types of wood products.

Summary of the Open-ended Responses

The open-ended responses can be categorized into three areas:

1. Information pertaining to why buyers are specifically purchasing CSRM wood products, 2. Information pertaining to why buyers are specifically avoiding CSRM wood products and 3. Overall views of the future of the CSRM wood product industry in the next five years. Each topic will be summarized individually.

Reasons for CSRM Wood Product Preference

One of the overwhelming reasons for purchasing CSRM wood products given by both open-ended answers and close-ended responses pertains to cost savings. These savings or economies can be broken down into two groups -- freight savings on purchases in the area and use of purchases to provide a back haul situation on trucks already in the region. Next in line to price considerations is the availability of the products. Many purchasers were specific about their purchases, and those who gave dimensions usually specified a 1 inch or 2 inch size -- from 2x4's through 2x10's and 1x4's through 1x12's. Quality of the products was also mentioned by a small number of respondents.

Reasons for CSRM Wood Product Avoidance

Overwhelmingly there is a perceived quality problem with certain types of CSRM wood products. There is a great deal of concern about the following areas: green lumber, general instability of the wood, low grades and general overall perceived low quality. One respondent felt that wide dimension lumber tended to be unstable, while others felt that the raw timber was just not of the same size and quality as that which could be obtained from the

north and northwest. Quality complaints did not center around just one species but included Ponderosa Pine, Lodgepole Pine, Englemann Spruce, whitewoods, pine in general, spruce in general, Southern Douglas Fir and Hem-fir. A small number of respondents also stated problems with availability and customers' preference for non-CSRМ products.

Future of CSRМ Wood Product Industry

Many respondents did not specifically answer this question in reference to the CSRМ. As may have been expected, the group is divided into two camps -- those who feel that the currently depressed market will bounce back and become strong as soon as interest rates decline and those who predict an unsteady and poor market for the next five years and the future in general. There is a consensus of those who comment on the decline that many small firms whether mills or other channels in the distribution chain, are being driven out of business by the current conditions and that only the larger ones are surviving.

There is also a general split in responses on the subject of the future of the CSRМ wood industry specifically. On one side, there are those who feel that rising freight costs and increased regional wood product demands will create a very positive picture for the area. On the other side of the coin is the group which states that although the demand will increase, the quality and quantity of wood products in the CSRМ cannot compete with outside areas. There is also limited concern expressed about the wood product shortages in the CSRМ caused by control of the industry in terms of conservationists/ environmentalists as well as poor planning on the part of the federal government.

FINDINGS SUMMARIZED BY RESEARCH QUESTION

Research Question 1.a. What are the channels for producers in the CSRM area to reach construction, industrial, and consumer markets?

Findings: Less than 1/3 of the total volume enters wholesale channels to reach markets. Based on wholesaler responses, this 1/3 part of the CSRM production would go to retailers \approx 60%, contractors 10%, manufacturers 18%, and others 12%.

About 10% of the volume is sold direct to retailers. The total volume estimated to move through retailers is 28% $[(.6 \times .3) + (.1)]$.

This calculation is based on the information in the above paragraph. Based on retailers responses, 56% of their business goes to building contractors and 36% to household consumers and farm and ranch users.

About 60% of the mills' output moves directly to an end user, nearly always in the local area. Key customer groups include mines utilities, and governments (18%), farm and ranch users, (11%), household consumers (9%), and contractors (11%).

Less than 25% of the mills market direct to wholesalers. The findings about volume, quality, and quantity suggest it is the larger mills who supply a significant quantity of goods, and with good quality control who are marketing through wholesalers. The mills marketing direct are producing in more selected categories for somewhat specialized markets. For example, timbers for utilities and mines, common boards for household consumers, timbers and common boards for farm and ranch uses, studs and timbers for contractors.

The manufactured goods category is comparatively small. To the extent that CSRM products are used in this segment, they are being purchased primarily through wholesalers.

Research Question 1.b. What are the channels for producers outside the CSRM area to markets in the CSRM area?

Findings: There are several ways imported material enters the CSRM area. The majority moves from independent or affiliated mills to a warehouse wholesaler. It then moves to user or retailer as has been discussed. The office wholesaler/brokers do handle a large portion of the remaining business, selling to warehouse wholesalers and retailers. Retailers also purchase selected items directly from independent and affiliated mills.

Research Question 1.c. What are the channels for producers in the CSRM area to markets outside the CSRM area?

Findings: The majority of the wholesale (30% of total) and retail (10%) sales are to firms outside the CSRM area. Virtually all of the direct sales (60% of the total) are to users in the CSRM or occasionally an adjoining state.

Research Question 2-3. Are forest products brought into the CSRM area direct substitutes for products already produced in the area? If yes, what are the reasons?

Findings: Substitute products definitely enter the CSRM market area. Two-thirds of the area mills say this happens to them and every member of the channel states that there are products they avoid purchasing from the CSRM area (wholesales 38%, retailers 38%, and users 19%). The

data suggest the bias, for whatever reason, is more prevalent in the channel. The implication is that the user takes whatever is offered by the channel.

The channel members say they purchase CSRM products when the specie they want is available (30-40%), at a better price (35% - 55%), and they can get it fast (35% - 40%) through established business connections (30% - 40%).

The avoidance of particular products is centered on quality concerns and to some extent on specie consideration.

The choice to avoid the CSRM products does not seem to be within grades. Rather, selection is made by product category.

CONCLUSION

This market structure study has provided several definitive conclusions. The face validity of the findings, and therefore conclusions, based on the internal consistency of responses among mills, wholesalers, retailers, and users was very good. The forest products industry is essentially a commodity business. Products must be available on demand that are of a consistent quality, by preferential specie, in economical purchase quantities, and at the lowest possible price. Wholesalers dominate the channel of distribution, being the primary source of supply for retailers and manufacturers, and a significant source of material for contractors. Many wholesalers do avoid, or at least do not seek out, CSRM products. Their bias is predictable based on the nature of the commodity business. A desire to purchase from a few sources a complete breadth of product line, in large quantities, and consistent quality is understandable. Their quality bias seems to center on the CSRM product being green.

Retailers purchase primarily from wholesalers but do go direct to the mill for some products. Their primary customer is the contractor and household consumer.

The CSRM mills recognize their difficulty in competing for the contractor, manufacturer, and consumer business via wholesaler-retailer channel. The mills are reaching some non-CSRM area markets through wholesalers. They seem to have trouble being competitively priced with the large Northwest and Inland Empire producers, but quantity and quality control may be even more of a factor than price.

The surviving mills are basing their success on developing directly marketed specialty products for specialty markets where some 60% of the CSRM output is going.

The mills' problem is competing by product category and not necessarily by grade.

A program to strengthen the mills' competitive position might include the following elements:

1. An active attempt to identify specialty product/markets.
2. An education/extension type program to provide expertise on direct marketing.
3. Possible establishment of a cooperative selling arrangement to combine production into economical selling units. This arrangement would have to include a demand for strict quality (drying) control.
4. A long range program aimed at educating customers as to the comparability (where appropriate) of species.

APPENDIX A



College of Business
Department of Marketing

Colorado State University
Fort Collins, Colorado
80523

August 24, 1981

Dear Mill Manager,

My name is Michelle Morgan. I am a graduate student in the College of Business at Colorado State University. As part of the degree requirements, I am conducting an industry study of wood products which are made and sold in the Central and Southern Rocky Mountain Region. I refer to this area as the CSRM throughout the survey.

Of particular interest is the information that can only be provided by mills like yours. I need your help. Could you take a few minutes to carefully complete the enclosed questionnaire? There is a postage paid return envelope enclosed for your convenience.

No information will be used to identify particular firms and results will be reported only in the aggregate. If you are interested in receiving a copy of the final report, please enclose your business card in the reply envelope, along with your completed questionnaire.

I need the help of the person who knows most about the source and sales of wood products. If there is another individual you believe could provide the information that I need, other than yourself, could you please hand this to them?

In a few days, I will be calling several mill managers who received the survey to see if there are any questions or problems in completing the survey.

I greatly appreciate your time and want to thank you in advance for completing the questionnaire as soon as time allows.

Sincerely,

A handwritten signature in cursive script that reads "Michelle Morgan".

Michelle Morgan
Graduate Student
College of Business
Colorado State University

1. In what state are you located? _____
2. What is your title? _____
3. Do you market your wood products in the Central and Southern Rocky Mountain (CSRM) area of Arizona, New Mexico, Colorado, Wyoming and Western South Dakota?
 _____ Yes _____ No (if no, skip to question #6)
4. If you do market in the CSRM area, what is your primary competition?
 _____ a. Similar products from the local area
 _____ b. Similar products from outside the local area
5. If your answer was (a) above, where are the wood products coming from?

6. Which of your products are most vulnerable to outside competition?

7. Do you think competitive products are entering your market area?
 _____ Yes _____ No (if no, skip to question #9)
8. Please check the reason(s) why competitive products are entering your market area. Do not restrict your response to those listed and check as many as apply.
 _____ a. Price differentials
 _____ b. Specification for certain species by buyers
 _____ c. Subjective preference for certain species by buyers
 _____ d. Quantity available by grade or species
 _____ e. Quality available within grade
 _____ f. Quantity available by speed of service
 _____ g. Buyers prefer to purchase established buying connections where they purchase a wider range of products than locally produced
 _____ h. Buyers have affiliation with sole source suppliers
 _____ i. There is a bias against locally produced products
 _____ j. Other, please comment:

9. Do you market all or most of your products in the local (CSRM) area?
 _____ Yes _____ No
10. If no, please check as many of the following reasons as apply as to why you do not market in the local area?
 _____ a. We are a primary producer for an affiliated seller located in _____ (state).
 _____ b. We can get better prices outside the local area
 _____ c. There is not enough demand in the local market to absorb the local supply.
 _____ d. Other, please comment:

11. Do you handle any plywood?
 _____ Yes _____ No (if no, skip to question # 14 on next page)
12. What grades and species do you carry in plywood?

13. From what states does the plywood originate and to what states do you sell?
 States of origin _____
 States of customers _____

14. Do you handle any particleboard?

____ Yes ____ No (if no, skip to question #16)

15. From what states does the particleboard originate and to what states do you sell?

States of origin _____

States of customers _____

16. Please check all the species categories you regularly handle in the following wood products.

	SELECTS +FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Douglas Fir-Larch							
Hem-Fir							
Englemann Spruce							
Lodgepole Pine							
Ponderosa Pine							
Redwood & Cedar							
Others							

17. Please check what grades you handle in the following wood categories. For those you check please add the species you regularly handle in that grade.

COMMON BOARDS

SPECIES

() No. 2 and Better _____

() No. 3 & No. 4 _____

() No. 5 _____

() Do not carry common boards _____

STRUCTURAL DIMENSION

() Select Structural _____

() No. 1 & No. 2 _____

() No. 3 & Economy _____

() Do not carry structural dimension _____

LIGHT FRAMING

() Construction & Standard _____

() Utility & Economy _____

() Do not carry light framing _____

STUDS

() Stud grade _____

() Economy stud _____

() Do not carry studs _____

FACTORY LUMBER

() Moulding Stock _____

() Moulding _____

() Shop grades _____

() Box stock _____

() Cut sash & door stock _____

() Jamb & head stock _____

() Do not carry factory lumber _____

please continue on page 3

18. Please check from what geographical areas the wood species you handle originate.

PAGE 3

	DOUGLAS FIR-LARCH	HEM-FIR	ENGLEMAN SPRUCE	LOGEPOLE PINE	PONDEROSA PINE	REDWOOD + CEDAR
Arizona						
California						
Colorado						
New Mexico						
Western South Dakota						
Wyoming						
Washington & Oregon						
Idaho & Montana						
Utah & Nevada						
Canada						
All Others						

() I do not know the state of origin of the wood species I handle,

I buy from

(please specify the state where you buy)

19. In a previous question you told me the geographical origin of the wood species you handle. Now could you please check from what geographical areas the wood products you handle originate.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Arizona							
California							
Colorado							
New Mexico							
Western South Dakota							
Wyoming							
Washington & Oregon							
Idaho & Montana							
Utah & Nevada							
Canada							
All Others							

() I do not know the state of origin of the wood products I handle,

I buy from

(please specify the state where you buy)

20. Please check the main groups of customers to whom you sell the following wood products.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Lumber wholesaler							
Bldg. Contractor							
Lumber Retailer							
Home Center Retailer							
Cabinet Manufacturer							
Furniture Manufacturer							
Bldg. Materials Mfr.							
Other Wood Product Mfr.							
Farm & Ranch Users							
Household Consumer							
Other							

please continue on page 4

21. Please estimate the total percentage sales of all your wood products to each type of customer you sell.

Lumber Wholesaler	_____ %
Building Contractor	_____ %
Lumber Retailer	_____ %
Home Center Retailer	_____ %
Cabinet Manufacturer	_____ %
Furniture Manufacturer	_____ %
Bldg. Material Manufacturer	_____ %
Other Wood Products Manufacturer	_____ %
Farm & Ranch Users	_____ %
Household Consumer	_____ %
Other	_____ %
TOTAL	100 %

22. Please list the states (or countries if applicable) of the main customers for the wood products you handle, in order of volume with the highest volume state first and the lowest volume state last.

Lumber Wholesaler	_____
Bldg. Contractor	_____
Lumber Retailer	_____
Home Center Retailer	_____
Cabinet Manufacturer	_____
Furniture Mfr.	_____
Building Material Mfr.	_____
Other Wood Product Mfr.	_____
Farm & Ranch Users	_____
Household Consumers	_____
Other	_____

23. What predictions would you make concerning the status of the wood industry in the Central and Southern Rocky Mountain (CSRM) region for the next five years?

Thank You



College of Business
Department of Marketing

Colorado State University
Fort Collins, Colorado
80523

August 24, 1981

Dear Wholesale Lumber Manager,

My name is Michelle Morgan. I am a graduate student in the College of Business at Colorado State University. As a part of the degree requirements, I am conducting an industry study of wood products which are made and sold in the Central and Southern Rocky Mountain Region. I refer to this area as the CSRM throughout the survey.

Of particular interest is the information that can only be provided by wholesale lumber companies like yours. I need your help. Could you take a few minutes to carefully complete the enclosed questionnaire? There is a postage paid return envelope enclosed for your convenience.

No information will be used to identify particular firms and results will be reported only in the aggregate. If you are interested in receiving a copy of the final report, please enclose your business card in the reply envelope, along with your completed questionnaire.

I need the help of the person who knows the most about the source and sales of wood products. If there is another individual you believe could provide the information that I need other than yourself, could you please hand this to them.

In a few days, I will be calling several of the wholesale lumber companies who received a survey to see if there are any questions or problems in completing the survey.

I greatly appreciate your time and want to thank you in advance for completing the questionnaire as soon as time allows.

Sincerely,

A handwritten signature in cursive script that reads "Michelle Morgan".

Michelle Morgan
Graduate Student
College of Business
Colorado State University

1. In what state are you located? _____
2. What is your title? _____
3. How is your business best described? (please check one of the following)
 - ☐ a. Independent office wholesaler or broker
 - ☐ b. Independent warehouse wholesaler
 - ☐ c. Affiliated with producer office
 - ☐ d. Affiliated with producer warehouse
 - ☐ e. Affiliated with retailer chain
 - ☐ f. Affiliated with retailer warehouse
 - ☐ g. Other _____
 (please specify) _____
4. Do you purchase any wood products produced in the Central and Southern Rocky Mountain (CSRM) area of Arizona, New Mexico, Colorado, Wyoming and Western South Dakota? _____
 (If don't know skip to #10)
☐ Yes ☐ No (If no, skip to #7) ☐ Don't Know skip to #10
5. Please identify the products you purchase from the CSRM area and reasons you purchase them from the CSRM area.

6. Please check which of the following influence your decision to purchase CSRM wood products. (Check as many as apply)

<input type="checkbox"/> Price differentials	<input type="checkbox"/> Quality of products
<input type="checkbox"/> Availability by species	<input type="checkbox"/> Requested/preferred by my customers
<input type="checkbox"/> Availability by grade	<input type="checkbox"/> Established business connections
<input type="checkbox"/> Speed of service	
<input type="checkbox"/> Other _____	

 (please specify) _____
7. Are there any wood products you avoid purchasing from the CSRM area?
☐ Yes ☐ No (If no, skip to #10)
8. Please identify the products you avoid and the reasons you avoid them.

9. Please check which of the following influence you to avoid purchasing CSRM wood products. (Check as many as apply)

<input type="checkbox"/> Price differentials	<input type="checkbox"/> Quality does not meet bldg. code stds.
<input type="checkbox"/> Not available in quantities needed	<input type="checkbox"/> Quality variation within grade
<input type="checkbox"/> Not available by species needed	<input type="checkbox"/> Affiliation with sole source supplier
<input type="checkbox"/> Not available by grade needed	<input type="checkbox"/> Customers do not prefer or request
<input type="checkbox"/> Does not meet quality standards	
<input type="checkbox"/> Other _____	

 (please specify) _____
10. Do you handle any plywood?
☐ Yes ☐ No (if no, skip to question #13)
11. What grades and species do you carry in plywood?

12. From what states does the plywood originate and to what states do you sell?
 States of origin _____
 States of customers _____
13. Do you handle any particleboard?
☐ Yes ☐ No (if no, skip to question #15)
14. From what states does the particleboard originate and to what states do you sell?
 States of origin _____
 States of customers _____

15. Please check all the species categories you regularly handle in the following wood products.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Douglas Fir-Larch							
Hem-Fir							
Englemann Spruce							
Lodgepole Pine							
Ponderosa Pine							
Redwood & Cedar							
Others							

16. Please check what grades you handle in the following wood categories. For those you check please add the species you regularly handle in that grade.

COMMON BOARDSSPECIES

- () No. 2 and Better _____
 () No. 3 & No. 4 _____
 () No. 5 _____
 () Do not carry common boards _____

STRUCTURAL DIMENSION

- () Select Structural _____
 () No. 1 & No. 2 _____
 () No. 3 & Economy _____
 () Do not carry structural dimension _____

LIGHT FRAMING

- () Construction & Standard _____
 () Utility & Economy _____
 () Do not carry light framing _____

STUDS

- () Stud grade _____
 () Economy stud _____
 () Do not carry studs _____

FACTORY LUMBER

- () Moulding Stock _____
 () Moulding _____
 () Shop grades _____
 () Box stock _____
 () Cut sash & door stock _____
 () Jamb & head stock _____
 () Do not carry factory lumber _____

17. Please check the source of supply for the following wood products.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Independent mill							
Affiliated mill							
Office Wholesaler/Broker							
Independent Warehouse Wkslr.							
Affiliated Warehouse Wkslr.							
Millwork Plant							
Retailer							
Other							

18. Please check from what geographical areas the wood species you handle originate.

PAGE 3

	DOUGLAS FIR-LARCH	HEM-FIR	ENGLEMANN SPRUCE	LOGEPOLE PINE	PONDEROSA PINE	REDWOOD + CEDAR
Arizona						
California						
Colorado						
New Mexico						
Western South Dakota						
Wyoming						
Washington & Oregon						
Idaho & Montana						
Utah & Nevada						
Canada						
All Others						

() I do not know the state of origin of the wood species I handle,

I buy from

(please specify the state where you buy)

19. In a previous question you told me the geographical origin of the wood species you handle. Now could you please check from what geographical areas the wood products you handle originate.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Arizona							
California							
Colorado							
New Mexico							
Western South Dakota							
Wyoming							
Washington & Oregon							
Idaho & Montana							
Utah & Nevada							
Canada							
All Others							

() I do not know the state of origin of the wood products I handle,

I buy from

(please specify the state where you buy)

20. Please check the main groups of customers to whom you sell the following wood products.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Lumber wholesaler							
Bldg. Contractor							
Lumber Retailer							
Home Center Retailer							
Cabinet Manufacturer							
Furniture Manufacturer							
Bldg. Materials Mfr.							
Other Wood Product Mfr.							
Farm & Ranch Users							
Household Consumer							
Other							

please continue on page 4

21. Please estimate the total percentage sales of all your wood products to each type of customer you sell.

Lumber Wholesaler	_____ %
Building Contractor	_____ %
Lumber Retailer	_____ %
Home Center Retailer	_____ %
Cabinet Manufacturer	_____ %
Furniture Manufacturer	_____ %
Bldg. Material Manufacturer	_____ %
Other Wood Products Manufacturer	_____ %
Farm & Ranch Users	_____ %
Household Consumer	_____ %
Other	_____ %
TOTAL	100 %

22. Please list the states (or countries if applicable) of the main customers for the wood products you handle, in order of volume with the highest volume state first and the lowest volume state last.

Lumber Wholesaler	_____
Bldg. Contractor	_____
Lumber Retailer	_____
Home Center Retailer	_____
Cabinet Manufacturer	_____
Furniture Mfr.	_____
Building Material Mfr.	_____
Other Wood Product Mfr.	_____
Farm & Ranch Users	_____
Household Consumers	_____
Other	_____

23. What predictions would you make concerning the status of the wood industry in the Central and Southern Rocky Mountain (CSRM) region for the next five years?

Thank You



College of Business
Department of Marketing

Colorado State University
Fort Collins, Colorado
80523

August 24, 1981

Dear Retail Lumber Manager,

My name is Michelle Morgan. I am a graduate student in the College of Business at Colorado State University. As a part of the degree requirements, I am conducting an industry study of wood products which are made and sold in the Central and Southern Rocky Mountain Region. I refer to this area as the CSRM throughout the survey.

Of particular interest is the information that can only be provided by retail lumber and home center companies like yours. I need your help. Could you take a few minutes to carefully complete the enclosed questionnaire? There is a postage paid return envelope enclosed for your convenience.

No information will be used to identify particular firms and results will be reported only in the aggregate. If you are interested in receiving a copy of the final report, please enclose your business card in the reply envelope, along with your completed questionnaire.

I need the help of the person who knows the most about the source and sales of wood products. If there is another individual you believe could provide the information that I need, other than yourself, could you please hand this to them.

In a few days, I will be calling several of the retail companies who received a survey to see if there are any questions or problems in completing the survey.

I greatly appreciate your time and want to thank you in advance for completing the questionnaire as soon as time allows.

Sincerely,

A handwritten signature in cursive script that reads 'Michelle Morgan'.

Michelle Morgan
Graduate Student
College of Business
Colorado State University

1. In what state are you located? _____
2. What is your title? _____
3. How is your business best described? (please check one of the following)
 - ☐ a. Independent lumber retailer
 - ☐ b. Independent chain lumber retailer
 - ☐ c. Independent home center retailer
 - ☐ d. Independent chain home center retailer
 - ☐ e. Affiliated with wholesaler
 - ☐ f. Affiliated with manufacturer
 - ☐ g. Other _____(please specify) _____
4. Do you purchase any wood products produced in the Central and Southern Rocky Mountain (CSRM) area of Arizona, New Mexico, Colorado, Wyoming and Western South Dakota? _____ (If don't know skip to #10)
____ Yes ____ No (If no, skip to #7) ____ Don't Know
5. Please identify the products you purchase from the CSRM area and reasons you purchase them from the CSRM area.

6. Please check which of the following influence your decision to purchase CSRM wood products. (Check as many as apply)

<input type="checkbox"/> Price differentials	<input type="checkbox"/> Quality of products
<input type="checkbox"/> Availability by species	<input type="checkbox"/> Requested/preferred by my customers
<input type="checkbox"/> Availability by grade	<input type="checkbox"/> Established business connections
<input type="checkbox"/> Speed of service	
<input type="checkbox"/> Other _____	

(please specify) _____
7. Are there any wood products you avoid purchasing from the CSRM area?
____ Yes ____ No (If no, skip to #10)
8. Please identify the products you avoid and the reasons you avoid them.

9. Please check which of the following influence you to avoid purchasing CSRM wood products. (Check as many as apply)

<input type="checkbox"/> Price differentials	<input type="checkbox"/> Quality does not meet bldg. code stds.
<input type="checkbox"/> Not available in quantities needed	
<input type="checkbox"/> Not available by species needed	<input type="checkbox"/> Quality variation within grade
<input type="checkbox"/> Not available by grade needed	<input type="checkbox"/> Affiliation with sole source supplier
<input type="checkbox"/> Does not meet quality standards	<input type="checkbox"/> Customers do not prefer or request
<input type="checkbox"/> Other _____	

(please specify) _____
10. Do you handle any plywood?
____ Yes ____ No (if no, skip to question #13)
11. What grades and species do you carry in plywood?

12. From what states does the plywood originate and to what states do you sell?
States of origin _____
States of customers _____
13. Do you handle any particleboard?
____ Yes ____ No (if no, skip to question #15)
14. From what states does the particleboard originate and to what states do you sell?
States of origin _____
States of customers _____

15. Please check all the species categories you regularly handle in the following wood products.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Douglas Fir-Larch							
Hem-Fir							
Englemann Spruce							
Lodgepole Pine							
Ponderosa Pine							
Redwood & Cedar							
Others							

16. Please check what grades you handle in the following wood categories. For those you check please add the species you regularly handle in that grade.

COMMON BOARDSSPECIES

- () No. 2 and Better _____
 () No. 3 & No. 4 _____
 () No. 5 _____
 () Do not carry common boards _____

STRUCTURAL DIMENSION

- () Select Structural _____
 () No. 1 & No. 2 _____
 () No. 3 & Economy _____
 () Do not carry structural dimension _____

LIGHT FRAMING

- () Construction & Standard _____
 () Utility & Economy _____
 () Do not carry light framing _____

STUDS

- () Stud grade _____
 () Economy stud _____
 () Do not carry studs _____

FACTORY LUMBER

- () Moulding Stock _____
 () Moulding _____
 () Shop grades _____
 () Box stock _____
 () Cut sash & door stock _____
 () Jamb & head stock _____
 () Do not carry factory lumber _____

17. Please check the source of supply for the following wood products.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Independent mill							
Affiliated mill							
Office Wholesaler/Broker							
Independent Warehouse Whslr.							
Affiliated Warehouse Whslr.							
Millwork Plant							
Retailer							
Other							

18. Please check from what geographical areas the wood species you handle originate.

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	DOUGLAS FIR-LARCH	HEM-FIR	ENGLEMANN SPRUCE	LOGEPOLE PINE	PONDEROSA PINE	REDWOOD + CEDAR
Arizona						
California						
Colorado						
New Mexico						
Western South Dakota						
Wyoming						
Washington & Oregon						
Idaho & Montana						
Utah & Nevada						
Canada						
All Others						

() I do not know the state of origin of the wood species I handle,

I buy from

(please specify the state where you buy)

19. In a previous question you told me the geographical origin of the wood species you handle. Now could you please check from what geographical areas the wood products you handle originate.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Arizona							
California							
Colorado							
New Mexico							
Western South Dakota							
Wyoming							
Washington & Oregon							
Idaho & Montana							
Utah & Nevada							
Canada							
All Others							

() I do not know the state of origin of the wood products I handle,

I buy from

(please specify the state where you buy)

20. Please check the main groups of customers to whom you sell the following wood products.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Lumber wholesaler							
Bldg. Contractor							
Lumber Retailer							
Home Center Retailer							
Cabinet Manufacturer							
Furniture Manufacturer							
Bldg. Materials Mfr.							
Other Wood Product Mfr.							
Farm & Ranch Users							
Household Consumer							
Other							

please continue on page 4

21. Please estimate the total percentage sales of all your wood products to each type of customer you sell.

Lumber Wholesaler	_____ %
Building Contractor	_____ %
Lumber Retailer	_____ %
Home Center Retailer	_____ %
Cabinet Manufacturer	_____ %
Furniture Manufacturer	_____ %
Bldg. Material Manufacturer	_____ %
Other Wood Products Manufacturer	_____ %
Farm & Ranch Users	_____ %
Household Consumer	_____ %
Other	_____ %
TOTAL	100 %

22. Please list the states (or countries if applicable) of the main customers for the wood products you handle, in order of volume with the highest volume state first and the lowest volume state last.

Lumber Wholesaler	_____
Bldg. Contractor	_____
Lumber Retailer	_____
Home Center Retailer	_____
Cabinet Manufacturer	_____
Furniture Mfr.	_____
Building Material Mfr.	_____
Other Wood Product Mfr.	_____
Farm & Ranch Users	_____
Household Consumers	_____
Other	_____

23. What predictions would you make concerning the status of the wood industry in the Central and Southern Rocky Mountain (CSRM) region for the next five years?

Thank You



College of Business
Department of Marketing

Colorado State University
Fort Collins, Colorado
80523

August 24, 1981

Dear Wood Product Manufacturer,

My name is Michelle Morgan. I am a graduate student in the College of Business at Colorado State University. As part of the degree requirements, I am conducting an industry study of wood products which are made and sold in the Central and Southern Rocky Mountain Region. I refer to this area as the CSRM throughout the survey.

Of particular interest is the information that can only be provided by wood product manufacturers like you. I need your help. Could you take a few minutes to carefully complete the enclosed questionnaire? There is a postage paid return envelope enclosed for your convenience.

No information will be used to identify particular firms and results will be reported only in the aggregate. If you are interested in receiving a copy of the final report, please enclose your business card in the reply envelope, along with your completed questionnaire.

I need the help of the person who knows the most about the source and sales of wood products. If there is another individual you believe could provide the information that I need other than yourself, could you please hand this to them?

In a few days, I will be calling several wood product manufacturers who received a survey to see if there are any questions or problems in completing the survey.

I greatly appreciate your time and want to thank you in advance for completing the questionnaire as soon as time allows.

Sincerely,

A handwritten signature in cursive script that reads "Michelle Morgan".

Michelle Morgan
Graduate Student
College of Business
Colorado State University

1. In what state are you located? _____
2. What is your title? _____
3. How is your business best described? (please check one of the following)
 - ☐ a. Furniture manufacturer
 - ☐ b. Fixture manufacturer
 - ☐ c. Crate, pallet manufacturer
 - ☐ d. Other _____
 (please specify) _____
4. Do you purchase any wood products produced in the Central and Southern Rocky Mountain (CSRM) area of Arizona, New Mexico, Colorado, Wyoming and Western South Dakota? _____ (If don't know)

☐ Yes ☐ No (If no, skip to #7) ☐ Don't Know - skip to #10
5. Please identify the products you purchase from the CSRM area and reasons you purchase them from the CSRM area.

6. Please check which of the following influence your decision to purchase CSRM wood products. (Check as many as apply)

<input type="checkbox"/> Price differentials	<input type="checkbox"/> Quality of products
<input type="checkbox"/> Availability by species	<input type="checkbox"/> Requested/preferred by my customers
<input type="checkbox"/> Availability by grade	<input type="checkbox"/> Established business connections
<input type="checkbox"/> Speed of service	
<input type="checkbox"/> Other _____	

 (please specify) _____
7. Are there any wood products you avoid purchasing from the CSRM area?

☐ Yes ☐ No (If no, skip to #10)
8. Please identify the products you avoid and the reasons you avoid them.

9. Please check which of the following influence you to avoid purchasing CSRM wood products. (Check as many as apply)

<input type="checkbox"/> Price differentials	<input type="checkbox"/> Quality does not meet bldg. code stds.
<input type="checkbox"/> Not available in quantities needed	
<input type="checkbox"/> Not available by species needed	<input type="checkbox"/> Quality variation within grade
<input type="checkbox"/> Not available by grade needed	<input type="checkbox"/> Affiliation with sole source supplier
<input type="checkbox"/> Does not meet quality standards	<input type="checkbox"/> Customers do not prefer or request
<input type="checkbox"/> Other _____	

 (please specify) _____
10. Do you handle any plywood?

☐ Yes ☐ No (if no, skip to question #13)
11. What grades and species do you carry in plywood?

12. From what states does the plywood originate ?

 States of origin _____
13. Do you handle any particleboard?

☐ Yes ☐ No (if no, skip to question #15)
14. From what states does the particleboard originate?

 States of origin _____

15. Please check all the species categories you regularly use in the following wood products.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Douglas Fir-Larch							
Hem-Fir							
Englemann Spruce							
Lodgepole Pine							
Ponderosa Pine							
Redwood & Cedar							
Others							

16. Please check what grades you use in the following wood categories. For those you check please add the species you regularly use in that grade.

COMMON BOARDSSPECIES

- () No. 2 and Better _____
 () No. 3 & No. 4 _____
 () No. 5 _____
 () Do not carry common boards _____

STRUCTURAL DIMENSION

- () Select Structural _____
 () No. 1 & No. 2 _____
 () No. 3 & Economy _____
 () Do not carry structural dimension _____

LIGHT FRAMING

- () Construction & Standard _____
 () Utility & Economy _____
 () Do not carry light framing _____

STUDS

- () Stud grade _____
 () Economy stud _____
 () Do not carry studs _____

FACTORY LUMBER

- () Moulding Stock _____
 () Moulding _____
 () Shop grades _____
 () Box stock _____
 () Cut sash & door stock _____
 () Jamb & head stock _____
 () Do not carry factory lumber _____

17. Please check the source of supply for the following wood products.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Independent mill							
Affiliated mill							
Office Wholesaler/Broker							
Independent Warehouse Whslr.							
Affiliated Warehouse Whslr.							
Millwork Plant							
Retailer							
Other							

18. Please check from what geographical areas the wood species you use originate.

PAGE 3

	DOUGLAS FIR-LARCH	HEM-FIR	ENGLEMANN SPRUCE	LODGEPOLE PINE	PONDEROSA PINE	REDWOOD - CEDAR
Arizona						
California						
Colorado						
New Mexico						
Western South Dakota						
Wyoming						
Washington & Oregon						
Idaho & Montana						
Utah & Nevada						
Canada						
All Others						

() I do not know the state of origin of the wood species I use,

I buy from _____
(please specify the state where you buy)

19. In a previous question you told me the geographical origin of the wood species you use. Now could you please check from what geographical areas the wood products you use originate.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Arizona							
California							
Colorado							
New Mexico							
Western South Dakota							
Wyoming							
Washington & Oregon							
Idaho & Montana							
Utah & Nevada							
Canada							
All Others							

() I do not know the state of origin of the wood products I use,

I buy from _____
(please specify the state where you buy)

20. What predictions would you make concerning the status of the wood industry in the Central and Southern Rocky Mountain (CSRM) region for the next five years?

Thank You.

1. In what state are you located? _____
2. What is your title? _____
3. How is your business best described? (please check one of the following)
 - ☐ a. Millwork - Moulding manufacturer
 - ☐ b. Truss manufacturer
 - ☐ c. Door frame manufacturer
 - ☐ d. Other, please explain: _____
4. Do you purchase any wood products produced in the Central and Southern Rocky Mountain (CSRM) area of Arizona, New Mexico, Colorado, Wyoming and Western South Dakota? _____ (If don't know
 _____ Yes _____ No (If no, skip to #7) _____ Don't Know skip to #10)
5. Please identify the products you purchase from the CSRM area and reasons you purchase them from the CSRM area.

6. Please check which of the following influence your decision to purchase CSRM wood products. (Check as many as apply)

<input type="checkbox"/> Price differentials	<input type="checkbox"/> Quality of products
<input type="checkbox"/> Availability by species	<input type="checkbox"/> Requested/preferred by my customers
<input type="checkbox"/> Availability by grade	<input type="checkbox"/> Established business connections
<input type="checkbox"/> Speed of service	
<input type="checkbox"/> Other _____	

 (please specify)
7. Are there any wood products you avoid purchasing from the CSRM area?
 _____ Yes _____ No (If no, skip to #10)
8. Please identify the products you avoid and the reasons you avoid them.

9. Please check which of the following influence you to avoid purchasing CSRM wood products. (Check as many as apply)

<input type="checkbox"/> Price differentials	<input type="checkbox"/> Quality does not meet bldg. code stds.
<input type="checkbox"/> Not available in quantities needed	
<input type="checkbox"/> Not available by species needed	<input type="checkbox"/> Quality variation within grade
<input type="checkbox"/> Not available by grade needed	<input type="checkbox"/> Affiliation with sole source supplier
<input type="checkbox"/> Does not meet quality standards	<input type="checkbox"/> Customers do not prefer or request
<input type="checkbox"/> Other _____	

 (please specify)
10. Do you handle any plywood?
 _____ Yes _____ No (if no, skip to question #13)
11. What grades and species do you carry in plywood?

12. From what states does the plywood originate?
 States of origin _____
13. Do you handle any particleboard?
 _____ Yes _____ No (if no, skip to question #15)
14. From what states does the particleboard originate?
 States of origin _____

15. Please check all the species categories you regularly use in the following wood products.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Douglas Fir-Larch							
Hem-Fir							
Englemann Spruce							
Lodgepole Pine							
Ponderosa Pine							
Redwood & Cedar							
Others							

16. Please check what grades you use in the following wood categories: For those you check please add the species you regularly use in that grade.

COMMON BOARDSSPECIES

- () No. 2 and Better _____
 () No. 3 & No. 4 _____
 () No. 5 _____
 () Do not carry common boards _____

STRUCTURAL DIMENSION

- () Select Structural _____
 () No. 1 & No. 2 _____
 () No. 3 & Economy _____
 () Do not carry structural dimension _____

LIGHT FRAMING

- () Construction & Standard _____
 () Utility & Economy _____
 () Do not carry light framing _____

STUDS

- () Stud grade _____
 () Economy stud _____
 () Do not carry studs _____

FACTORY LUMBER

- () Moulding Stock _____
 () Moulding _____
 () Shop grades _____
 () Box stock _____
 () Cut sash & door stock _____
 () Jamb & head stock _____
 () Do not carry factory lumber _____

17. Please check the source of supply for the following wood products.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Independent mill							
Affiliated mill							
Office Wholesaler/Broker							
Independent Warehouse Whslr.							
Affiliated Warehouse Whslr.							
Millwork Plant							
Retailer							
Other							

please continue on page 3

18. Please check from what geographical areas the wood species you use originate.

PAGE 3

	DOUGLAS FIR-LARCH	HEM-FIR	ENGLEMANN SPRUCE	LOGGEPOL PINE	PONDEROSA PINE	REDWOOD + CEDAR
Arizona						
California						
Colorado						
New Mexico						
Western South Dakota						
Wyoming						
Washington & Oregon						
Idaho & Montana						
Utah & Nevada						
Canada						
All Others						

() I do not know the state of origin of the wood species I use,

I buy from _____
(please specify the state where you buy)

19. In a previous question you told me the geographical origin of the wood species you use. Now could you please check from what geographical areas the wood products you use originate.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Arizona							
California							
Colorado							
New Mexico							
Western South Dakota							
Wyoming							
Washington & Oregon							
Idaho & Montana							
Utah & Nevada							
Canada							
All Others							

() I do not know the state of origin of the wood products I use,

I buy from _____
(please specify the state where you buy)

20. What predictions would you make concerning the status of the wood industry in the Central and Southern Rocky Mountain (CSRM) region for the next five years?

Thank You.



College of Business
Department of Marketing

Colorado State University
Fort Collins, Colorado
80523

August 24, 1981

Dear Contractor,

My name is Michelle Morgan. I am a graduate student in the College of Business at Colorado State University. As part of the degree requirements, I am conducting an industry study of wood products which are made and sold in the Central and Southern Rocky Mountain Region. I refer to this area as the CSRM throughout the survey.

Of particular interest is the information that can only be provided by contractors, like yourself. I need your help. Could you take a few minutes to carefully complete the enclosed questionnaire? There is a postage paid return envelope enclosed for your convenience.

No information will be used to identify particular firms and results will be reported only in the aggregate. If you are interested in receiving a copy of the final report, please enclose your business card in the reply envelope, along with your completed questionnaire.

I need the help of the person who knows the most about the source and sales of wood products. If there is another individual you believe could provide the information that I need other than yourself, could you please hand this to them.

In a few days, I will be calling several contractors who received a survey to see if there are any questions or problems in completing the survey.

I greatly appreciate your time and want to thank you in advance for completing the questionnaire as soon as time allows.

Sincerely,

A handwritten signature in cursive script that reads "Michelle Morgan".

Michelle Morgan
Graduate Student
College of Business
Colorado State University

1. In what state are you located? _____
2. What is your title? _____
3. How is your business best described? (please check one of the following)
 - ☐ a. Builder of residential structures
 - ☐ b. Builder of commercial structures
 - ☐ c. Builder of both residential and commercial structures
 - ☐ d. Other _____
 (please specify) _____
4. Do you purchase any wood products produced in the Central and Southern Rocky Mountain (CSRM) area of Arizona, New Mexico, Colorado, Wyoming and Western South Dakota? _____ (If don't know skip to #10)
 _____ Yes _____ No (If no, skip to #7) _____ Don't Know skip to #10
5. Please identify the products you purchase from the CSRM area and reasons you purchase them from the CSRM area.

6. Please check which of the following influence your decision to purchase CSRM wood products. (Check as many as apply)

<input type="checkbox"/> Price differentials	<input type="checkbox"/> Quality of products
<input type="checkbox"/> Availability by species	<input type="checkbox"/> Requested/preferred by my customers
<input type="checkbox"/> Availability by grade	<input type="checkbox"/> Established business connections
<input type="checkbox"/> Speed of service	
<input type="checkbox"/> Other _____	

 (please specify) _____
7. Are there any wood products you avoid purchasing from the CSRM area?
 _____ Yes _____ No (If no, skip to #10)
8. Please identify the products you avoid and the reasons you avoid them.

9. Please check which of the following influence you to avoid purchasing CSRM wood products. (Check as many as apply)

<input type="checkbox"/> Price differentials	<input type="checkbox"/> Quality does not meet bldg. code stds.
<input type="checkbox"/> Not available in quantities needed	
<input type="checkbox"/> Not available by species needed	<input type="checkbox"/> Quality variation within grade
<input type="checkbox"/> Not available by grade needed	<input type="checkbox"/> Affiliation with sole source supplier
<input type="checkbox"/> Does not meet quality standards	<input type="checkbox"/> Customers do not prefer or request
<input type="checkbox"/> Other _____	

 (please specify) _____
10. Do you handle any plywood?
 _____ Yes _____ No (if no, skip to question #13)
11. What grades and species do you carry in plywood?

12. From what states does the plywood originate?
 States of origin _____
13. Do you handle any particleboard?
 _____ Yes _____ No (if no, skip to question #15)
14. From what states does the particleboard originate?
 States of origin _____

15. Please check all the species categories you regularly use in the following wood products.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Douglas Fir-Larch							
Hem-Fir							
Englemann Spruce							
Lodgepole Pine							
Ponderosa Pine							
Redwood & Cedar							
Others							

16. Please check what grades you use in the following wood categories. For those you check please add the species you regularly use in that grade.

COMMON BOARDSSPECIES

- () No. 2 and Better
 () No. 3 & No. 4
 () No. 5
 () Do not carry common boards

STRUCTURAL DIMENSION

- () Select Structural
 () No. 1 & No. 2
 () No. 3 & Economy
 () Do not carry structural dimension

LIGHT FRAMING

- () Construction & Standard
 () Utility & Economy
 () Do not carry light framing

STUDS

- () Stud grade
 () Economy stud
 () Do not carry studs

FACTORY LUMBER

- () Moulding Stock
 () Moulding
 () Shop grades
 () Box stock
 () Cut sash & door stock
 () Jamb & head stock
 () Do not carry factory lumber

17. Please check the source of supply for the following wood products.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS	TIMBERS	FACTORY LUMBER
Independent mill							
Affiliated mill							
Office Wholesaler/Broker							
Independent Warehouse Whslr.							
Affiliated Warehouse Whslr.							
Millwork Plant							
Retailer							
Other							

please continue on page 3

18. Please check from what geographical areas the wood species you use originate.

PAGE 3

	DOUGLAS FIR - LARCH	HEM - FIR	ENGLEMANN SPRUCE	LOGGPOLE PINE	PONDEROSA PINE	REDWOOD + CEDAR
Arizona						
California						
Colorado						
New Mexico						
Western South Dakota						
Wyoming						
Washington & Oregon						
Idaho & Montana						
Utah & Nevada						
Canada						
All Others						

() I do not know the state of origin of the wood species I use,

I buy from

(please specify the state where you buy)

19. In a previous question you told me the geographical origin of the wood species you use. Now could you please check from what geographical areas the wood products you use originate.

	SELECTS + FINISH	COMMON BOARDS	STRUCTURAL DIMENSION	LIGHT FRAMING	STUDS - TIMBERS	FACTORY LUMBER
Arizona						
California						
Colorado						
New Mexico						
Western South Dakota						
Wyoming						
Washington & Oregon						
Idaho & Montana						
Utah & Nevada						
Canada						
All Others						

() I do not know the state of origin of the wood products I use,

I buy from

(please specify the state where you buy)

20. What predictions would you make concerning the status of the wood industry in the Central and Southern Rocky Mountain (CSRM) region for the next five years?

Thank You.

APPENDIX B

Good Morning,

Last week I mailed you a survey concerning the sources and shipments of wood products you handle. If you have already mailed it, thank you for your time.

If you haven't returned the survey, I would certainly appreciate it if you would. To insure that my study contains valid information, every returned questionnaire is important.

Thanks again for your help.

Michelle Morgan
Graduate Student, Colorado State University

APPENDIX C

ABBREVIATION GLOSSARY

Geographical abbreviations:

AL	Alabama	KS	Kansas	OH	Ohio
AZ	Arizona	KY	Kentucky	OK	Oklahoma
AR	Arkansas	MD	Maryland	OR	Oregon
CA	California	MI	Michigan	SD	South Dakota
CO	Colorado	MN	Minnesota	TN	Tennessee
FL	Florida	MS	Mississippi	TX	Texas
ID	Idaho	MT	Montana	UT	Utah
IL	Illinois	NB	Nebraska	WI	Wisconsin
IN	Indiana	NM	New Mexico	WY	Wyoming
IA	Iowa	ND	North Dakota	OT	Other, non-states

WSD Western South Dakota

Wstrn Washington, Oregon, Montana, Utah, Nevada, Idaho, California, Alaska, Hawaii

Mid W-S Nebraska, Kansas, Oklahoma, Texas, Arkansas, Louisiana

Grt Lks North Dakota, Minnesota, Wisconsin, Illinois, Iowa, Missouri, Michigan, Indiana

NE Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey, Ohio, Maryland, Washington D.C.

SE West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Florida

East Eastern states, not specified

Response Abbreviations:

CB	Common boards
CSRM	Central & Southern Rocky Mountain Region
DFL	Douglas Fir - Larch
DK	Don't know
ES	Englemann Spruce
FL	Factory Lumber
HDWD	Hardwood
HF	Hem Fir
LF	Light Framing
LP	Lodgepole Pine
MAHOG	Mahogany
MFR	Manufacturer
MGR	Manager
N/A, N/R	Not applicable, No response
PB	Particleboard
PLY	Plywood
Pine	Pine, details not specified
PP	Ponderosa Pine
PRES	President
PURCH	Purchasing Agent
RC	Redwood & Cedar
SD	Structural Dimension
SF	Selects & Finish
Spruce	Spruce, details not specified
ST	Studs
TIM	Timber
VP	Vice President
WW	Whitewoods